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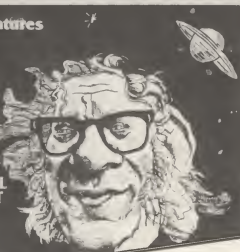
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EDITORIAL: THE MASQUERADE

by Isaac Asimov

art: Frank Kelly Freas

I have just returned from the 38th World Science Fiction Convention, held during the Labor Day weekend of 1980 in Boston, and familiarly known as "Nor-eascon Two." To a certain extent, I was limited in my ability to appreciate the manifold splendors of the occasion by the fact that I had to do a great deal of autographing of books. I don't complain of this, especially since I was so overcome by the fact that so many young women wanted my autograph that I felt compelled to kiss them (in a fatherly sort of way) out of sheer gratitude. Still, it is time-consuming.

But I did attend the two great functions associated with every World Convention, the Hugo Awards Ceremony and the Masquerade.

As for the Hugo Awards, you will have noticed the pertinent information in the December 1980 issue of the magazine. We did very well, thank you; and I won't belabor the point.

What about the Masquerade, though?

To those of you who have never attended one, let me tell you that it is not taken lightly by the contestants. Literally scores of men and women of a broad spectrum of ages present themselves in costumes designed to elicit impressions associated with science fiction or fantasy, and no effort is spared. Months of hard work go into the conception, design, and production of many of the costumes; and the results are often eye-catching in the extreme.

On this particular occasion, the Masquerade, from the first fanfare to the final applause for the top winner (a pair of gorgeous, Aztec-inspired costumes), lasted three hours. The main ballroom of the Hynes Auditorium was filled to capacity with thousands of on-lookers, and a delighted time was had by all.

The Masquerade, in a way, sets the tone for the joy of a Convention. During the Convention, for nearly a hundred hours, a special world is constructed for the science fiction and fantasy enthusiast.



A large, modern hotel with an adjoining convention center becomes the property of thousands of people who construct a new society that is isolated from the rest of the world and that is marked by a sub-culture of its own.

Each of the inhabitants of that society, look in whatever direction he or she will, sees others of interests and persuasions that are similar. Each finds that all speak the same language, that all understand each other, that all have the same very special culture heroes (many of them present in the flesh, walking among them as though they were ordinary human beings, to the delight and awe of the onlookers).

There is an unceasing glow in the atmosphere, for at no time in the day or night is there not *something* going on *somewhere* with-*someone* attending. One midnight I watched a beautiful belly-dancer performing to Yiddish folk-songs in my honor. At the other extreme, Janet and I spent a frustrated three hours trying to track down Lester and Judy-Lynn del Rey against the stubborn refusal of the hotel to let us have their room number. (We finally made it.)

Of course, one of the chief delights of the convention is the utter *unconventionality* that affects everyone. After all, the whole point of science fiction is that it deals with societies other than our own, and fantasy deals with impossible societies. Each of us has his or her own favorite society, and why should we not follow the dictates of fashion of our favorite? It happens, therefore, that the whole convention is a kind of costume party, and you can see anything from loincloths to broadswords—and why not?

The trouble is, though, that every year, the newspaper of the city in which the convention takes place sends some unschooled reporter to the hotel, and the result is an inane item that reports on the superficial and misses everything of importance.

This time there was a story in the *Boston Globe* of August 31, 1980. It was fifteen inches long and almost every inch was devoted to a few youngsters and the costumes they wore. Factual enough, but that was *all* there was—and it was all condescending.

There was one line that did admit that "professional science fiction writers, including Isaac Asimov and Damon Knight, are attending, to lead discussions." Damon Knight and his wife, Kate Wilhelm, were co-Guests of Honor, which the reporter might have mentioned, but didn't; and my own name was misspelled.

Nor was the flavor of the "discussions" fairly described. The story said, "the subjects include such earth-shaking topics as 'Life on a Neutron Star.'"

I strongly doubt that the reporter had any scientific training at all and may well not have known what a neutron star was. That particular topic, however, was handled by Robert Forward, a talented astrophysicist (and SF novelist); and it dealt with advanced considerations of the properties of neutron stars and the fundamental nature of life. It drew a good audience of science fiction readers who were interested in that not-easy topic and enjoyed it, too.

In addition, Marvin Minsky of M.I.T. discussed artificial intelligence, and Mark Chartrand of the Hayden Planetarium talked about space exploration as a money-making business *right now*.

Well-known science fiction writers discussed works in progress and led discussions in every phase of science fiction. The subjects that were covered ranged from SF art, to Japanese SF, to SF humor, to SF nostalgia, to publisher's problems. There were movies and slide shows and special children's programs. The variety and intellectual breadth was enormous, and all of it was missed by the silly newspaper story.

As a matter of fact, there are some very unusual things about a science fiction convention that a sensible newspaper might be very interested in. There is the little matter of the behavior of those attending the convention, for instance.

I told you that thousands attended the Masquerade, but I should also tell you that those thousands (whatever the peculiarity of the costumes of some of them) were intelligent and well-behaved. They moved about a large, complex, and confusing hotel and convention center with a minimum of delay and a total absence of turbulence. In the face of inevitable crowding and elevator-slowness, they remained quiet and good-humored, behaving with circumspection, and with consideration for each other.

Just suppose that there were an equal number of thousands of people attending a rock-and-roll concert at the Sheraton-Boston. I doubt if the hotel would be standing at the end of a single night, let alone a four-day weekend. Just suppose that there were an equal number of thousands of American Legionnaires or Shriners attending the hotel and imagine the noise and chaos.

Not so for the audience at the Masquerade. At one point, there were some extraneous remarks from a few in the audience that were uncomplimentary to what was proceeding on the stage. The master of ceremonies stopped the proceedings for a moment and said slowly, "There will be no noise of that sort again—none whatever!" And there wasn't! A dead silence fell and that was that.

What does that say about science fiction and fantasy readers?

Their intelligence? Their character? Their commitment to reason and to social responsibility? And where is there any mention of that, *ever*, in any wise-guy news-story on a science fiction convention.

Yes, there have been occasional distressing incidents in the history of conventions—damage—loss—even theft. What happens then is that the attendees rally round to contribute money to make good that damage, loss, and theft—and generally oversubscribe. Such things are never mentioned in news-stories.

But never mind. We've lived with this kind of nonsense for four decades now, and have survived and flourished and will continue to do so.

As late as 1955, at the 13th Convention at Cleveland, the attendance was only 300. In Boston, in 1980, the attendance was the biggest yet and certainly topped 6,000.

Mind you, I don't entirely approve of these vast numbers. In Cleveland in 1955, it was easy to find your good friends and foregather with them. In Boston in 1980, the crowds were such that it was pure and unlikely coincidence for you to encounter a given friend. I have already mentioned my almost fruitless search for Lester. I caught only one glimpse of Sprague de Camp and of Robert Sheckley, only two of Gordon Dickson and of Joe Haldeman, and so on.

Nevertheless, such petty inconveniences fade in the face of the significance of the numbers—that more and more people are interested in science fiction, sufficiently interested to attend conventions, and sufficiently satisfied with what they find there to keep the attendance growing.

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ON BOOKS

by Baird Searles

Day By Night by Tanith Lee, DAW Books, \$2.25 (paper).

Drinking Sapphire Wine by Tanith Lee, DAW Books, \$1.75 (paper).

The Dragon Lensman by David A. Kyle, Bantam Books, \$1.95 (paper).

Hotel Transylvania by Chelsea Quinn Yarbro, Signet, \$1.95 (paper).

The Palace by Chelsea Quinn Yarbro, Signet, \$2.25 (paper).

Blood Games by Chelsea Quinn Yarbro, Signet, \$2.75 (paper).

The Wind in the Willows by Kenneth Grahame, Holt, Rinehart and Winston, \$16.95.

The Annotated Gulliver's Travels by Jonathan Swift, edited and with notes by Isaac Asimov, Crown, \$19.95.

Two new books to start off with this month, very dissimilar but sharing one curious quality in common and both a good deal of fun, depending, of course, on your taste.

The quality in common is that they are both, in their ways, mysteries. The science-fictional mystery is fairly rare, if you consider mystery in the classical sense, i. e. whodunit (Asimov's *The Caves of Steel* and its sequel, *The Naked Sun*, are probably the best known examples).

But if you consider a mystery in the slightly broader sense of a work that engenders suspenseful tension until a solution is found, many SF stories and novels fall into this category. They could be called howdunnits or whatdunnits or whodunwhats; the reader is kept guessing until the climax or denouement by the omission of an important factor.

Tanith Lee's *Day By Night* goes about this very subtly; nowhere is the reader ever told directly that there's anything to guess at. But if by the second chapter you're not wondering how in hell the author is going to solve the mystery she has oh-so-cleverly slipped you, you'd better go back and start over.

The action takes place on a planet that turns one face constantly to its sun, therefore giving it a "night side," and a "day side." Part one of each chapter takes place in the civilization of the day side, part two in a culture of the night. We soon find that the story of the day side is supposedly a fiction, being told by a female aristocrat of the night side, a "Fabulist" whose electronically transmitted stories

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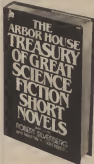
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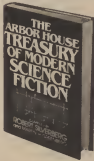
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are one of the ways that the workers—almost slaves—are kept controlled.

Since so far as the darksiders know, there is no life on the sunny side of the street—whoops, sorry—of the planet, the story that Vitra Klovez is telling is this world's science fiction. And since she is drawing on her own experience, the two stories have interesting parallels. Both concern an aristocratic brother and sister and a male friend, though the emotional relationships are different in each. The two cultures also have similarities—both are rather decadent, two-class oligarchies whose respective technologies, once brilliantly complex, are now failing for lack of knowledge—but also vast differences due to their physical circumstances.

But suddenly the story that Vitra is "telling" unnervingly starts to anticipate events in her own life, events she would have no way of forecasting. And there, of course, is the mystery. What is the *real* relationship between story and storyteller and their two different worlds?

Being true to the critics' creed, I can say no more. But it is an intriguing and clever book, perhaps not up to Lee's wonderful Sapphire Wine duo, but certainly head and shoulders above much of what's being published today in sophistication and intelligence.

(It should be noted that Lee's *Drinking Sapphire Wine*, the sequel to *Don't Bite the Sun*, is finally back in print. The two make up one long novel that is that rarity of rarities, a really *funny* SF work.)

The other new novel is more of a conventional mystery, but it's also something else; it is, of all things, a new Lensman book, called *The Dragon Lensman* by David A. Kyle, which has no connection, to my knowledge, with a new Lensman book recently published in England called, succinctly, *The New Lensman*.

I've noted that I don't usually like to handle sequels or spinoffs in this column, an arbitrary rule meant to cut down on the number of books that must be considered monthly. But this sort of long-after-the-fact addition to a classic series enables me to dig up the past of SF and its wonderful works, which I think younger readers should know about and would like to know about.

E. E. "Doc" Smith took the action-adventure pulp space opera about as far as it could go. Only Edmond Hamilton equalled him in tossing whole worlds around the Galaxy, but even Hamilton never matched the conceptual hugeness of Smith's "Lensman" series, in which a war is waged across endless time and measureless space by the beneficent Arisians and the evil Eddorians. Earth of the future

is a major ally of Arisia; and many humans—as well as other intelligent races of the Galaxy—are Lensmen, who are the super-heroes in the war against Boskone (the major representatives of the nasty Eddorians) aided by their Arisian-supplied Lenses, weapons of great psychic power.

The Dragon Lensman's author has supplied a brief but serviceable precis of the Lensman saga, so don't be afraid you're being dumped into the middle of an unknown universe. The novel itself takes place in time some years before the last book in the series, *Children of the Lens*, and is an incident (a major one, but still only an incident compared to some of the more cosmic carryings-on in the Smith books) in the career of Worsel, a Lensman of the dragon-like Velantian race.

The Velantians have constructed an artificial satellite to serve as a sort of museum of technology, and deposited there a vast number of antique and modern devices, some extremely sophisticated.

Well, by golly, suddenly the machines are revolting, and coming close to taking over "the Planetoid of Knowledge"; and only Worsel and some fellow Lensmen (including Kimball Kinnison, the hero of the series) can stop them. The mystery is, of course, who is behind this dastardly move.

Again, the critics' creed prevents me from saying more. As a matter of fact, I'm not sure I could, anyhow. I only finished the book a day or so ago, but given the plenitude of space battles, land battles, hand-to-hand combats, and BEM-bashings that are thrown at the reader, already I'm not sure who did what and with what and to whom.

But it's all great fun, and Kyle has caught the slightly dated but charming quality of Smith's prose. Where else now can you find wonderful sentences such as:

"Kimball Kinnison, at that moment the most powerful man in two galaxies, ground his teeth . . ." or "They are now in a hand-to-hand engagement barely a million miles from you!"

I'm sure that anyone with a slight sense of historical perspective and a taste for good old-fashioned thud and blunder will enjoy this new Lensman book, and if you haven't read the old ones, let this one lead you into them. They're a fair treat.

Another way to solve the sequel problem is to review the whole series so far as it's gone. This is dangerous simply because it's a vast investment of time on two or more books; and if it turns out to be something you don't fancy much, you have to spend that much more

space being negative (which, despite rumors to the contrary, most reviewers don't really enjoy).

My time-and-space investment in Chelsea Quinn Yarbro's "Saint Germaine, the Vampire" series was not so rewarding as I had hoped, but far from a total loss.

A few years back, we hoped that all the Dracula spin-offs that could be spun had been. Then, just when you thought it was safe to get back into bed, along came Anne Rice with her stunningly evoked *Interview With A Vampire* and started a whole new wave of bloodletting.

There was a difference in this new breed of vampires. Dracula had always been a creature of the supernatural, unlike his fellow monster, Frankenstein's, who was the anti-hero of what many consider to be the first true SF novel. The "new" vampire is much closer to a rational creature, to the SF end of the fantasy spectrum. It is interesting, therefore, that several authors known for their science fiction have recently done vampire novels: Fred Saberhagen (*The Dracula Tapes* et al.), the abovementioned Tanith Lee (*Sabella*), and Chelsea Quinn Yarbro with her immortal Saint Germaine, about whom three novels have now appeared.

Since I fancy myself as something of a connoisseur of historical fiction, I was particularly interested in Yarbro's approach: her protagonist is indeed immortal; and the three novels are set in three separate periods of history, sequentially going backwards. The first to be published, *Hotel Transylvania*, takes place in the France of the Sun King, ca. 1743. Here Saint Germaine, who incidentally is a really nice guy with at least all of the seven cardinal virtues, battles a group of really unpleasant Satanists (nobility, of course) for the blood and body of the lovely Madelaine, which they want to misuse in all sorts of graphically described ways.

The Palace finds San Germano in Renaissance Florence, involved in building a palatial villa and all sorts of hanky-panky with the Medici; and in *Blood Games*, it's that particularly busy period of Roman history just after Nero when Rome had four Caesars in one year, and in the thick of it is—you guessed it—Ragoczy Sanct' Germain Franciscus (I had been wondering how Yarbro was going to manage the "Saint" part in pre-Christian Latin).

Now this could have been a set of fascinating historical variations on a theme. It's a novel idea to have a single hero set in several periods. The only theme that could handle it aside from immortality would be, of course, time travel; and I can think of no story that deals with any historical era as extensively as these do. Yarbro has

certainly done her research; descriptions of food and clothing are particularly detailed, but aside from that she has chosen to concentrate on action and sex (Saint Germain indulges in a variation of the latter which—for a change—is described more mystically than graphically, with partners of various sexes), and they are almost interchangeable among the three novels. I get no sense of the reality of these various times and places despite the details.

When there is this kind of concentration on sex and violence, particularly from a writer with some reputation for quality, I'm afraid I think—perhaps naïvely, perhaps unfairly—that the writing was done to sell lots of books to the largest mass-market possible. But believe me, there is no law that says a writer shouldn't write to sell lots of books or that the results can't be enjoyed on a simple-minded level.

Rumor has it that there are several more Saint Germaine novels planned. An Egyptian one has already been set up in *Blood Games*. But where *can* he go from there? Somehow, a Neolithic vampire is more than I can cope with.

There are certain primal fantasies which almost everyone discovered in childhood (given an early taste for fantasy and a reasonable

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library) but that remain important for life. A list, at least for my generation, would include the Alice books, *The Jungle Books*, *Winnie-the-Pooh*, and *The Wind in the Willows*. It's always a shock when a new generation rediscovers one of these that one has taken totally for granted—and suddenly there are new editions, new illustrations, and a good deal of redundant blather.

This has happened with *The Wind in the Willows*, with the release of a snazzy new edition with illustrations by Michael Hague. Now this book is very much a part of my life (it was mostly because of Toad's canary-yellow van that I found myself roaming the roads of Ireland with a tinker's cart and a recalcitrant horse named Joey), and I'm going to be all codgerish and reactionary about this *nouveau* version.

Hague's illustrations are certainly the illustrative equivalent of wide screen and technicolor; several are really quite splendid. But what, I mutter sullenly, was wrong with Ernest Shepard's modest black-and-white originals (he also illustrated Pooh) that are for me as much a part of the book as Tenniel's pictures are of Alice? (No, I didn't like the Arthur Rackham version either.)

But what a lovely story it is! I defy you, at whatever age you are, not to get all choked up at the "Dulce Domum" or "The Piper at the

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ISLAND MAN
by R. A. Wilson
with Val Lahey



The author tells us he's a college graduate of scanty means whose time is mostly absorbed by writing. He has neither potted plants nor pets, although there is a cat who visits occasionally, and lives in a small Indiana town. This story is his first sale.

Had he been forced to give it a figure, the old man probably would have said that his life described a perfect arc; like a rainbow, or like a projectile obeying a basic law of ballistics. Like a rainbow, it was composed of many colors melting one into another. Like a projectile, it seemed destined to succumb to gravity.

"My life," he would say to himself as he sat through the evening hours on his front stoop, "has been a brief soaring above the dust." The darkness made the old man grow both lonely and philosophical, so that he would comfort himself with long monologues on difficult subjects. "Now, the arc that I have striven to complete by my living is near its end. And how different, in such a symmetrical thing as an arc, can the end be from the beginning? Yes," he smiled, fond of the image, "I have risen from the golden haze of my childhood only to descend again into the yellow fog of my dotage."

Ironically, just as he had spent his childhood among them, so he now lived his golden years surrounded by children. They came from where they played upon the river bank to sit around the old man's stoop. They were daubed with mud from the water which, as they listened to the old man, dried into a yellow dust. Despite the dirt, their good health and youthful vigor shone through, causing the old man to breathe an occasional, envious sigh.

"No," he would say to himself in one of his nocturnal monologues, "I do not envy them. Rather, I am drawn to them as though their golden haze exerts a magnetism upon my yellow fog. Is this something inevitable? Does this joining of the end of my arc with the beginning of theirs constitute a circle then?"

Soon, the old man would lose himself in a muddled and mystical exploration of rebirth and extinction; for it was dark and he was lonely and growing philosophical. In the daylight, he would forget such somber thoughts. When among the children, it was impossible for him to feel lonely. In the face of so much rambunctious life, even philosophy faltered.

The children came to hear the stories that he told of the old days and the old city. Their common belief, caught from their parents,

was that the old city was haunted. So, for them, the stories took on somewhat the flavor of ghost tales. The old man did not mean them to be such. He meant, through the stories, to preserve some fragment of an earlier time, a time when men had been like gods. He was not displeased, however, when a flicker of his own childhood returned to him during a story, bridging the chasm between him and the children.

That also was why he told the stories.

Usually, he would relate to them an incident from his own childhood, embellishing it with descriptions of the casual wonders that had existed in those days when men had been like gods. Certainly some of what he told them was exaggerated (childhood memories magnified by the lens of eighty summers) and some of it mistaken (childhood misconceptions never put right), for the old man had left the city at an early age and perhaps he did not completely understand the place himself.

His actual name was Geof Talmund, though no one ever called him that. The children, exercising a polite formality, addressed him with a reverential 'sir.' While the adults, having shed much of their reverence with their baby fat, referred to him simply as the old man. What did he call himself? Well, he scarcely ever talked about himself—except in the stories and in those he always called himself 'Young Geof.'

Each new generation of children learned of the exploits of Young Geof, while hardly realizing that the old man was speaking of himself. Not a child passed into adulthood without receiving the old man's gentle, almost accidental tutelage. All of them shared this golden experience of sitting on the tall grass by the old man's front stoop—with small knees drawn up or kneeling, but always with expressions rapt—listening to Geof Talmund's stories of an earlier, miraculous time.

His white hair was kindled by the midsummer sun. His face, too, seemed to glow, as though its weathered surfaces gathered and reradiated the ample energies of the sun. Fortunately, a persistent breeze, generated by cool, sea air from the west, tousled the children's hair and riffled through the soft linen of the old man's tunic. Without the breeze and the bit of shadow thrown by the elm on the wide front yard, the day would have been oppressively warm.

With calm brown eyes, Geof Talmund gazed down the strip of umber road (just a cartpath really) to see what the child had pointed to. Halfway down the hill, a group of men labored toward them.

Rising from the dark path, the warm air shimmered in front of them as they came, making recognition difficult—especially for the old man, whose eyesight was not what it once had been.

"The Council, sir!" said the sharp-eyed boy who had pointed. "The Council is coming to visit you!"

"Is it?" said Geof Talmund as he squinted down the hill. "Oh yes, Joshua. I think you are right."

After a moment of watching, the old man turned again to the children. His eyes were watery, perhaps from the sun. When he spoke, there was a perceptible tremor to his voice that the children had never heard before.

"Time has come, I suppose," he said to himself. Then to the children he said, "You will have to go. The Council's business is not your business. Not yet."

"But you haven't finished the story, sir."

"I will finish it in the afternoon, perhaps, or tomorrow." He nodded at one of the girls. "Wanda, you will be responsible for remembering where I left off."

He turned away from them to gaze down the hill at the approaching delegation. As he watched through the rising, troubled air, appeared like things reflected in turbulent water: some of them foreshortened and squat, almost ugly, others pulled out vertically like strings of taffy. The very air they lived in had, by warming, turned them into changeable, malleable figures.

Like the children are malleable, thought the old man.

"Sir?"

He turned to find that one of the children had not left, the one he had appointed to remember the story.

"Yes?"

"My name is Wendy, sir."

"Of course it is, dear."

The girl's eyes were downcast as she worked one bashful toe into the grass.

"But you called me Wanda."

"Did I?" The old man raised a startled eyebrow. "Then I am sorry, Wendy. From now on I shall remember your name as carefully as you remember the story I was telling."

The girl took that as a test of sorts. She said, "And I *do* remember, sir. You were telling about the wagons that run on sunlight—the way that sailboats run on the wind."

"Yes And where did I leave off?"

"Young Geof had just boarded the magic wagon. The door would

not open, so he climbed in through the window. Then he”

“That is enough, Wendy. Thank you. You remember very well.”

“Thank *you*, sir.” She turned to catch up with her playmates.

“Ah, Wendy?”

At the sound of his voice, the girl stopped and turned back. She had gone as far as the elm’s shadow. The part of her that remained in sunlight seemed, to the old man’s vision, incredibly illuminated. Her ashen hair shimmered in the light. Her skin shone so pale and freckled and smooth that he ached to reach out and touch her cheek. Her soiled jumper—just two pieces of poor cloth stitched casually together—seemed somehow better for hanging upon such a graceful creature. But a part of her had entered the shadow, where the old man’s failing vision could make out only a misty and indistinct form. He felt—it was foolish, he knew—but he felt that he had stopped her on the brink of oblivion, where she hung now, suspended between the sunlit present and the shadowy future.

“Sir?” The shy warble of her voice brought him back.

He rubbed his eyes, trying to clear his vision.

“Yes, dear,” he said after a moment. “But there *is* someone in your group named Wanda, isn’t there?”

“No, sir.” Though she tried to contain it, her face fairly blossomed into a grin.

“But you *do* know someone named Wanda?” suggested the old man.

“Yes, sir.” The grin had changed to a strange, wise smile. “My mother’s name is Wanda.” Then she tripped into the shadow laughing, and was gone.

Geof Talmund gazed at the place where the girl had stood. He supposed she would tell her mother about the old man’s mistake. If she did, then he knew at least one household this night, besides his own, that would lie awake to the passing of the years.

The old man shook his head once, almost resentfully.

“Perhaps they are right,” he said, looking at the Council which was negotiating the last few meters of the path. “Perhaps I *should* stop telling the stories. I grow too old for it.”

The men fanned out upon the wide front lawn around the stoop where the old man sat. They wore stern visages all of them, as though theirs was a mission of high dignity and seriousness. Geof Talmund had known them all as children and, in many ways, he thought of them as children still. He found himself smiling gently at their stiff postures and sober faces. And he wondered if he mightn’t look a little sappy to them: an old man sitting with the

sun in his face, grinning.

"Well, it has happened at last," he declared. "The high elders of the community have come to stop the crazy old man from filling their children's heads with notions."

With the sun in his face, the old man could not see the consternation that appeared suddenly on many faces, nor the puzzled glances they exchanged.

"High time, too," he said with sadness and resignation mingled in his voice. "I grow too old for it. I have become like an old house with weathered shingles and dusty cobwebs festooning the rafters." He grinned at them with the sunlight streaming in his face. "Or maybe I'm an old copper kettle that's worn so thin it won't survive another polishing."

"—But the stories must not end," blurted Hugh Clure, who was the first among the delegation to find his voice. There remained within each of them a certain reticence in the old man's presence, a reluctance to interrupt him as he spoke that was carried over from childhood.

Geof Talmund squinted up at the man.

"Who is this?" he said. "Is it Hugh Clure? I remember you. You were something of a bully as I recall."

Hugh glanced quickly at a couple of his nearest companions, but there was no embarrassment in his voice when he spoke.

"You taught us, old man, that childhood is merely one part of a process. Had I been perfect as a child, there would have been no need to grow into a man."

"You are right, of course," said Geof, smiling proudly at a lesson well taught. "But you say that the stories must not end? I conclude that your errand with me is much different from the one I had feared."

"Our *errand*," announced Hink Bardo, as he shouldered himself to Hugh's side, "is to guarantee the survival of the stories of Young Geof."

The old man shaded his eyes briefly as he looked up at the riverman, Captain Bardo.

He said, "I do not know if I desire to stay and tell stories forever, but I think I have no choice in the matter. For several years now a succession of veils has been interposed between the world and myself. First, my eyes obtained a gauzy dimness and no longer penetrate the mysteries of shadows. Now, my sinews fail me; sometimes they refuse to lift me from my bed. My tongue no longer detects the nuances of food. And my memory returns me only fleeting

images. The stories crumble and die even as I die."

"—Then you must take an apprentice," said Hink Bardo, "and soon."

"An apprentice Storyteller?" said Geof, seemingly surprised. But he spoke inwardly also, saying, *Or an apprentice Old Man? No. You are all of you already apprentices with that guild, though you may not know it.*

"We implore you," said Hugh Clure. "Take one of us as your apprentice so that our grandchildren may hear the stories as we have heard them, and as our parents heard them before us. Beside the river, the stories are what make us a people. They are a part of our common heritage. We are afraid to lose them. We fear our descendants will be much poorer without them."

Of course, the old man felt gratified that the river people took his stories so seriously. As he gazed at the crowd of men, some of them standing in the shadow of the elm, some of them in sunlight, he reflected on how childlike they remained even after so many years. But for their size, they might be children still, arrayed before him on the grass, awaiting a story. Blessed Sol lent the scene the same eerie brilliance and acute detail that Geof had witnessed with the girl, Wendy.

Or Wanda? The old man chuckled softly. *Perhaps I should take an apprentice,* he thought. *Perhaps Wendy's children would prefer a storyteller who doesn't bungle names.*

Again Hink Bardo put himself forward, saying, "You should choose a riverman to learn the stories. During long trips to the sea, our men have little to amuse themselves with, so they tell stories. Many of them, I've found, have a natural aptitude for the spinning of yarns."

"For sure," said someone in the crowd. "They're born liars."

Nature itself seemed to pause. The breeze sucked down to nothing. The sun hung brazen and still above as the men greeted a dangerous moment with cautious silence.

It was with extreme difficulty that Hink Bardo, who was a choleric individual at best, restrained himself from whirling about on the man who had spoken. Old Geof watched with alarm as an angry tic began below one of the Captain's eyes. Only when that nervous affliction had subsided (soothed by one of the calming mental exercises that they all practiced), did Geof dare to speak again. As was usual in such cases, he spoke gently.

"Do they provoke you often, Captain Bardo?"

"No, not often," said Hink, his voice still choked with feeling. "Not

since I was a child."

"Ah, I remember," said Geof. "As I recall, you, Hugh Clure, were one of the worst offenders in those days."

Hugh Clure, a large, raw-boned man, averted his eyes from Geof's in mute acceptance of the charge.

"I have grown since then," he said after a moment.

"Some of you have not," said Geof, pointing with his eyes at the man who had cast an aspersion on rivermen. "Respect me this much," he said, "And raise no quarrels today. I am an old man with no wish to see any of my children gasping and writhing like sad, dying fish on the ground."

They were all silent then, chastened and suddenly reminded that they were, indeed, this old man's children—just as their parents before them had been his children. As they stood there upon the hill by the elm tree, each man experienced a warmth and a light that had nothing to do with the noontime sun. This quiet mood abided many minutes as the breeze fingered the clothing of the grownup children and soughed the heavy branches of the elm.

Reluctantly, Geof broke the silence, directing his words at Captain Bardo.

"I am sure," he said, "that all your sailors are fine men, but my apprentice must be a man who has worked for years shaping things with his hands. I myself was a metal worker before I took up this peculiar profession of telling tales, but a mason, I suppose, would do the job as well—or a carpenter."

"—Or a potter?" suggested one man who, from the clayey stains upon his trousers and tunic, was himself of that profession.

Old Geof laughed out loud at the eagerness in the man's voice. "Yes," he said, "a potter certainly shapes things." He grinned happily at all of them. "Bring me an assortment of candidates chosen from among your shapers and I will select one to be your storyteller."

Only a small, chiding voice, buried deeply in Geof's mind, reminded him that the end was now in sight. Strangely, that notion did not trouble him. Enough, he told himself, was enough. Eighty summers was more than enough.

Myriad images, superimposed one upon another, crowded the old man's wide front yard. The past and the present vied within Geof's mind, like ocean tides pushing and pulling upon the mother water. In the bright sunlight, he could see the forms of men, but his memory—worn as it was—provided him with the faces of children, children who seemed somehow realer to him than these adults. But the past had always seemed more real to the old man. Perhaps that was

truly why he told the stories—to preserve this higher reality of his own.

Geof Talmund looked away from the Council and gazed across the broad river valley. He could see the tiny houses below on the opposite bank, and the patchwork fields beyond them, and above that the broad brow of Riverbend Hill, shielding the horizon. In the foreground, the river itself shone only in flashes of sunlight reflected through the waving branches of the trees. He could not see the children for the trees, but he could hear them playing on the near riverbank.

He nodded his head approvingly, thinking that much good had been accomplished in eighty summers. He shaded his eyes for a moment with the palm of one hand and squinted, trying to see the valley as it had appeared those many years ago. There had been no corn fields then, only sumac and groundsedge and a few willowy saplings. Where a rutted, dirt path now marked the traffic of the village, there had once been a hard asphalt road that snaked along beside the river for miles and miles. The last remnants of the highway were vanished long ago, absorbed by the vegetable world. Gone too was the old automobile—yes, it had been old even then—that had brought Geof here from the city. It had been among the first things to go as Geof cannibalized it for the tools its metal parts could provide.

The old man allowed his vision to return to the present scene. He looked at the men before him. They seemed slightly embarrassed, as though reluctant to interrupt Geof's reverie, yet anxious to have their business with him finished.

He squinted at the noontime sun, then at them.

"It is hot," he said, "and you have had a long hike up the hill. You should sit down here and rest before you leave."

Uneasy glances were traded among the councilmen.

"But we had thought to hurry back to the village," said Hugh Clure, "so that we may begin the selection of your apprentice."

"Do I look so unwell," laughed the old man, "that you must rush to find my replacement?" He paused and pretended to consider his own question for a moment. "No," he decided, mocking them gently, "I do not think I shall die today—nor even tomorrow. You have time to spend here with me. Or is your dignity so great that you dare not sit upon the grass as the children do?"

He made a downward gesture with his hands, indicating that they should sit. They hesitated, exchanging glances, then complied, each of them finding a place to settle in the tall green grass.

"I have a story for you."

"But the stories are for the children," protested one man.

"Some stories are not for children," said the storyteller.

"Is it a story of Young Geof?"

"Yes. It is the last story of Young Geof; for, after the time I will tell you of, Geof was never again young."

Sitting upon the familiar hillside, all of those men must have felt the long fingers of the past reaching for them, pulling them backward to their childhoods. Some few of them may even have found themselves enchanted by the drowsy midday heat and by the gentle cadences of the old man's voice so that they (via an easy sleight of mind) sloughed off the accumulation of the years and became again small boys listening to a wondrous story—as a sort of recess between stints of hard play on the riverbank.

But this was unlike any story they had heard before; less full of wonder than heartache. It began in turmoil and ended in grief.

The building survived.

But that was to be expected. Its prospectus had billed it and the other so-called 'Solo Structures' as islands of stability in a sea of change. No longer did a respected firm need endure the indignities of municipal service. The building's plumbing and sewage were self-contained. Its offices were 'modules of the future.' Its power came from an 'eye in the sky.' It stood aloof and unaware; independent of the city around it; independent of energy crunches and garbage strikes; independent of the people it contained.

Each morning at six thirty the lights in the groundfloor lobby (and vestibules, restrooms, hallways, info desks, etc.) came on like magic—or like clockwork, if you knew about the master chronometer that ticked away like the building's secret heart in a private room of an upper floor. Again like magic (or clockwork) the urinals all flushed twice an hour, so that many secretaries on many floors had once been able to prick up ears and hear the gentle, background *whooshing* sound that told them it was half past the hour. Such was the fearsome regularity of this flushing that it had not been uncommon once, near quitting time, to see a member of the steno pool with her head cocked curiously to one side and a far-off expression on her face as though she were listening to an inner music—an illusion that was ironically dissolved when the muffled gurgling of the urinals set her to putting pencils and paper clips away.

Still, twice an hour, the urinals throughout the building flushed. There were, however, no longer any secretaries to hear. Only Young

Geof heard the *whooshing* and, though he quickly discovered its cause, he never understood that it signaled half-hour intervals. To him, who knew nothing of the master chronometer upstairs, it seemed like so much magic.

Geof had not thought to count the sequences of light and dark in the corridors of the building, so he was not certain how long he had been inside. It had been many days at least since he had sought shelter there from the storm of depravity outside. At first he had been wary, prowling the corridors, searching storerooms and antechambers for a sign of grownups. But it had been a weekend when the first outbreaks had occurred, which was a dead time for the office building. Its ordinary denizens had been away. Only in the basement did Geof find a hint of what had transpired elsewhere. Two security guards, their drab brown uniforms decorated with dark medallions of blood, lay crumpled in their little office. Though Geof did not feel threatened by them, he did not venture into the basement again.

Nor did he venture outside again. He feared that the streets, which seemed so quiet, might spring again into violent life, with running feet slapping on pavement and anguished cries ringing down the urban canyon.

The building was his new home, his haven. He explored it carefully. He took his meals in the restaurant on the top floor. He slept in corridors since, even at night, the lights in the offices and waiting rooms would flicker to life when he entered and stay stubbornly on until he left. At night, only the corridors offered the succor of darkness to a young boy who craved sleep.

And he would not sleep on the soft furniture of the ground-floor lobby, for the glass doors that looked out on the darkened street also looked in. Geof did not want any chance passerby to spot a small boy asleep on the couch.

Once or twice, he fell asleep in the penthouse restaurant, while watching the jagged silhouette of the city. Many of the buildings, like his own, maintained a pattern of illumination, lifting strange three-dimensional ghosts of themselves against the night sky. Below, a few senseless streetlamps survived. They lit random, meaningless sections of pavement. Scarcely visible above the buildings, Geof could see a few lines of smoke rising, like slack ropes of grey against the greater blackness. The fires had diminished considerably since those first few days when smoke had risen in every quarter. Many of the older buildings had actually been destroyed.

But the new, self-sufficient buildings, like Geof's, survived. Fed

by invisible filaments of power from transceivers in geosynchronous orbit overhead, they automatically defended themselves from the arson that became practically epidemic as madness spread throughout the city. At the first hint of fire, the control of a given building passed from clockwork into computer mode. Doors in the affected areas received an electric impulse that magnetized their latches, pulling shut those that were open. This sealed the rooms off, while not preventing the escape of their inhabitants. Then, carbon dioxide gas was pumped into the burning rooms. Quietly, yet effectively, the offending flames were smothered.

Those men or women foolish enough or mad enough to set the fires in the first place were also unimpressed by the noise of the alarms. Unalert to the invisible, silent gas, they too were smothered.

It had been weeks, perhaps, since young Geof had seen humans. But that had been according to his own wishes. The last he had glimpsed had been vague figures running in the streets, chasing or being chased. Geof had been pursued himself, many times, but he had always eluded capture by hiding under automobiles or ducking down sidestreets. The constant fleeing had brought him at last to the downtown area, the area of the 'Solo Structures.' Since then he had seen nothing, as he watched from the windows of the penthouse restaurant, save for occasional, indefinable motions on the street below.

So, as he ate one morning in the rooftop restaurant, he was shocked to notice that one of the elevators was slowly climbing from the lobby below.

Reacting quickly after a moment of panic, Geof cleared the remnants of his meal from the window booth where he had been sitting and carried it through the swinging double doors to the kitchen. He shoved it, plate and all, into a disposal chute, then looked hurriedly around for any other signs of his presence that could be erased. Finding nothing, he darted back through the dining room to the foyer where the elevators opened out. He watched the digital readout above the door as the elevator climbed past floor after floor. He kept a hand on the call button for the other elevator. If the intruder rose above thirty-six—the floor below him—then Geof planned to head down in a hurry.

After several, seemingly endless moments, the readout flashed the number thirty and counted no higher. Geof felt the muscles of his stomach unclench and realized that he had been holding his breath. Relieved, he sat down on the plush carpet of the foyer and

watched the readout with a suspicious eye, making certain that it didn't wander from the thirtieth floor.

Gradually, it dawned on him that he was trapped—cornered in a penthouse restaurant thirty-seven stories above the street. Whoever, or whatever, now occupied the thirtieth held Geof prisoner unaware. Just as he had noticed the elevator bringing the intruder up, so the intruder would surely notice if Geof tried to ride the elevator to the lobby. And there was no stairway for him to escape down. As long as the stranger remained on the thirtieth floor, Geof could do nothing but watch the readout and wait.

As he maintained this vigil, he grew steadily more curious about what was happening on the thirtieth floor. There had been nothing tentative about the elevator's path. Without pause, it had gone to that floor and no other. Was this a sign that the long, unfathomable nightmare was over? Was this some man returning calmly to his work as though the extended and terrible weekend had never happened? Maybe Geof was making a mistake in hiding. Perhaps if he simply descended to the thirtieth floor he would find that his exile was over. Perhaps he could even be reunited with his parents.

That, of course, was childish, wishful thinking. Things could never be the same again. His mother was gone beyond recall. And his father? Well, Geof knew he could never feel comfortable with him again, could never call 'father' the man who had killed his mother.

Who had almost killed Geof.

But those ugly memories were already sheathed in protective tissue, were becoming gradually encysted like grains of sand in an oyster, becoming pearls. (Eighty years later, the memories would indeed resemble pearls; bright and round and smooth, ungraspable as actual events, but useful as shimmery symbols of something immense that had happened. Just so does Nature and Man's Mind decorate the ugliness of this world.)

Despite his curiosity, Geof was not seriously tempted to investigate what was happening on the thirtieth floor. The vividness had not yet worn off the dreadful images in his mind. For all he knew there was a storm of madness now raging seven stories below him. He could not bring himself to enter it willingly.

When the intruder finally did leave, Geof watched the digits of the readout diminish as the car descended through the lower levels. When it reached the ground floor, and remained there, Geof waited many minutes more before he was convinced that the stranger was gone for good. Then he stepped into the other elevator car and pushed the button for the thirtieth floor.

He knocked his elbow hard against the back wall of the elevator as he scrambled reflexively away from the doors. He barely noticed the pain though, being too intent upon the apparition that stood before him. Geof may have made a sound—perhaps a whimper, though he didn't remember it later—while his thoughts reeled around a pivot of terror. He had made a terrible, perhaps fatal mistake. Apparently, there had been more than one intruder. This one had stayed behind.

At first, Geof did not recognize it as a man. It was tall—twice his height—and entirely enveloped in a silvery fabric. Where a man's joints would be, the material was gathered into elastic bands, giving the creature a segmented, puffy appearance. The helmet was a creased silver shell with a window in the front. There were many other details to the outfit (such as the bulky tanks upon its back, and the elaborate, girdlelike appliance with dials and a speaker grill) but Geof was too stricken with fear to notice much more than the menacing outline as he cringed against the far wall of the elevator.

"Are you crazy too?" The man's voice was given a flutter by the simple transducer of his suit. He peered forward, bending slightly at the waist. He seemed as puzzled as Geof was frightened. He straightened and conked himself lightly on the helmet. "Damn," he said, "if that isn't a stupid question. If you *are* nuts, you certainly won't tell me." His silver-clad feet made scuffing noises as he entered the elevator to get Geof, who went rigid with horror as the slippery fabric of the man's gloves closed around his arms.

"Hey. Relax, fella. I'm not gonna hurt you."

The words, as spoken, were soothing, but the vinyl speaker element added a sinister-sounding burr edge to man's voice. Geof shrank further from his hands.

"Damn," said the man as he stood up and stepped back from Geof's huddled form. The boy had his slender arms folded around his head, anticipating a beating. "You sure must've had a rotten time of it," said the strangely dressed man. For a moment he watched the mute curve of the child's spine where it came through the torn fabric of his shirt, then he lifted his eyes to gaze at the wall of the elevator car as though seeing through it and through the rest of the building to the crypt-quiet city beyond. "Another stupid thing to say," he murmured. "*Everybody's* had a rotten time of it."

Not having received the expected pummelling, Geof relaxed a little. He turned his head just enough to peer out at the man from under one arm.

The lights in the corridor reflected off the window in the man's helmet, so that Geof could not see the grin that came to his lips.

"So? Have you decided that it's safe yet?"

With the unthinking honesty of a child, Geof shook his head slowly.

The man laughed.

"Believe me," he said. "You are safe."

It was then that the other elevator doors opened and a second suited figure joined the first.

"Well, I'll be damned," said the newcomer. "Blakely said it might not affect the children the same way."

"Oh? I didn't think he had it isolated yet."

"Doesn't. But he figures it'll turn out to be another acid virus with a jawbreaking name. If it is, then he says some of the children will adjust to it—absorb it, or something like that." He shrugged his shoulders, which caused the silvery fabric of his suit to rustle. "I don't pretend to understand it," he said. "Recombo's not my field."

"Sure glad it isn't mine," said the first man as they both looked down at Geof, who had risen into a low crouch.

"What's your name, son?"

"Geof," he said as he got his feet beneath him and came slowly erect.

"Geof," said the first man, pointing to himself, "my name is Bill and this is Jackson—but you can call him Jake if you want. We're friends. We want to help you."

"Sure," muttered the other. "A lot of good we can do him. We sure as hell can't take him back up with us."

"Why not?"

"Don't be dense. He's a carrier. You saw how quickly it spread here. Imagine how much faster it would move in our closed system."

The one called Bill thought about that for a moment.

"Yeah," he said, his speaker adding a painful flutter to his voice. "Still, we should do something to help him."

"Like what?"

"I don't know. I'll think of something while you're cutting into the cooler. Did you get the torch?"

The one called Jackson ducked back into the other elevator and returned hefting a device with hoses and nozzles attached to a cylindrical tank.

"So let's get to work," he said as he began lugging the apparatus down the corridor.

Bill knelt down, putting himself on a level with the boy.

"Geof," he said, "have you ever seen a cutting torch at work?"

Geof shook his head.

"Well, that thing Jake has is a torch. You want to come watch him use it?"

Appealing to his curiosity was perhaps the surest way of overcoming Geof's fears. That plus the fact that, with the lighted corridor behind him, Geof could now see through the window in the man's helmet to his face. Knowing that there was indeed a man inside that bulky, graceless costume provided a further reassurance. Geof craned his neck to peer along the corridor. Three doors down, Jake had entered an office. Geof looked back to the one called Bill.

"Yes, sir," he said. "I would like to watch."

"Well, come on then," said Bill. "We'll have to find you a pair of goggles in the lab."

Together they walked to the door that Jake had left ajar.

They didn't pause in the waiting room because there was nothing to see. It looked like every other waiting room in the building. (The literature had dubbed them 'reception modules.') Beyond that was the room that Bill had called the Lab. This was a place unlike any that Geof had yet explored. It had little in common with the other offices. It more nearly resembled the kitchen upstairs with its stainless steel sinks and metal cabinets. One side of the large room was sectioned off from the rest by man-high dividers made of opaque plastic panels. This was intended to give the effect of private office space. Above the dividers, Geof could see a black blossom of soot climbing the wall and spreading out upon the ceiling. Jake was standing beside a doorway, looking into one of the cubicles. He turned toward Bill.

"Better not let the kid see this," he said.

Bill motioned for Geof to stay put and went to join Jake. Geof could hear the men talking but he wasn't certain what it was about.

"What are those?" asked Bill. "Lab smocks?"

"Yeah. Looks like he soaked them in something. Maybe alcohol. I guess he meant to burn the whole place down."

"What stopped him?"

Jake pointed to rows of grillwork along the ceiling. "This building has one of those new computerized ventilation systems. It puts out fires with gas. Guess it must've put him out too."

"What's this stuff on the floor?" There was the sound of feet crunching on something brittle.

"Looks like pyrex. From the blood, I'd say he fell on something—like a beaker or a flask. What are you doing?"

"What does it look like? I'm covering him up."

"Terrific," Jake sneered. "I'm sure his family will thank you."

Bill didn't respond to that. He brushed by Jake as he left the cubicle, but he stopped before reaching Geof. He peered curiously at something on the wall. It looked to Geof like a squashed pie tin.

Following Bill, Jake picked up an object from the floor. It was a metal lab stand with a gleaming long rod screwed into a cast iron base. He came up beside Bill and placed the object's heavy base against the depression in the wall.

"Perfect fit," he said. "I believe I've discovered the murder weapon."

"Yes. But what was the victim?"

Jake looked closely. "It appears to be a speaker," he said, "or an alarm of some kind." He tossed the lab stand aside. "Its noise must've bothered him."

"That's crazy."

"Exactly the word I was thinking of," said Jake as he picked up his equipment and headed for the rear of the room. "Crazy."

The man called Bill shook his head sadly, then turned to a cabinet and rummaged through its drawers until he found a pair of dark-tinted glasses, which he handed to Geof.

"You have to wear them when you look at the torch. Otherwise the light will hurt your eyes."

They passed between tables like square columnar islands with sinks and gas fonts built into them. At the back of the room Jake was arranging his equipment in front of a glossy, stainless steel door. That reminded Geof of something he had seen in the kitchen upstairs.

"Is it a refrigerator?"

Bill looked at Geof as though surprised.

"—I mean, if it's food you're after, sir, there's a whole room upstairs—at least it looks like a room, but it's really a refrigerator and it's filled with food. It's not locked either."

"Hey, Jake. Did you hear that? He recognized it as a refrigerator."

"Yeah?" grumbled Jake. "So he's a bright kid. That doesn't change anything. We still can't help him."

"Maybe we can, Jake, if we just think the problem through." He turned toward Geof again. "Son, do you have any idea of what happened here?" He swung both arms wide in an all encompassing gesture.

Geof regarded him silently for a moment, his eyes reflecting a haunted reminiscence. "You mean," he said quietly, "do I know what

happened to make everyone angry?"

"Angry?"

"Acute paranoid schizophrenia," suggested Jake, "might look like a temper tantrum to the kid."

"Is that what they're calling it back home?"

"Yeah, but all they really know is that it's some sort of chemical imbalance." Jake chuckled sourly. "They don't even know *that* for sure. All they've got are theories."

"That's all they've ever had."

"Hell of a note, isn't it?" Jake gave a dry, short chuckle—more of a cough really than a sound of humor. "Epitaph for a Species: Lost Control of Late Model Theory at High Speed."

"Don't be so damned cynical. We haven't lost the whole species."

"So what's left? Us?" Again Jake made that humorless sound. "I suppose we've got a statistical chance of surviving—especially with the bone juice in here." He slapped the cooler door. "But still we're a mighty small gene pool to rebuild from."

"You're forgetting the kids," said Bill. "I know there are a lot of small bodies out there mixed in with the big, but there must have been quite a few, like Geof here, who avoided getting beaten or trampled to death."

"You said it yourself," answered Jake gloomily. "Think of all the *bodies*. There's gonna be plague to beat hell. That oughta take care of the rest of the kids."

Bill seemed deflated by the thought of the impending corruption on the streets outside. He leaned heavily against one of the tables.

"We're carrying our own air," he murmured, "so we couldn't tell. But it must already stink out there."

"—To high heaven," agreed Jake.

"God," Bill looked at Jake, "you seem almost *pleased* about it."

"Look, *partner*," Jake pointed a stiff finger at Bill, "I'm just trying to point out the plain facts for you. The kids don't have any more chance of surviving here than they would standing naked on Tranquility. This is now a hostile environment. Even if they survive whatever plagues that come, the damned en-ay-virus that killed their parents will eventually kill them too!"

"How can that be? I mean, if they're not dead from it yet?"

"If you'd been at the last overview session instead of playing house with what's-her-name, you'd *know* how that can be."

"Her name is Shansi, Jake, and we weren't playing house—"

"—I don't care what you were doing. *My partner* should have been there. Who do you think caught hell? Not you, you were having a

fine time. It was *me*, good old Jake, who got his hide flayed by Ricker!"

"I'm sorry, Jake. But, dammit, we've had sessions every day for the past two weeks and we've just gone over and over the same stuff. I didn't think it could do any harm to skip the last one."

Jake made a disgusted sound. "Try telling that to Ricker when we get back."

"Yeah," said Bill with an uneasy laugh. "I guess I've got one coming, huh?"

"You and me both. I've got another one coming for helping smuggle you into the booster range at the last second."

"I wouldn't worry about it," Bill laughed archly. "The black marks don't show up on you the way they do on me, Jake."

"I'm not worried about black marks! I'm just getting tired of hauling your white ass out of trouble all the time!"

"Okay, okay, I said I'm sorry. Just tell me what happened at the last session that was so blasted important."

"They brought in three muckamucks from Biochem for a sort of question and answer period."

"Three? Blakely and Marenkov and who else?"

"Schaus—*Doktor Mildred Schaus*."

"Never heard of her."

Jake shrugged. "She didn't have much to say. Blakely fielded most of the questions, of course."

"So what'd he have to say about the children?"

"That some of them *might* survive. And, if they did, they *might* develop a natural immunity to the virus—but that it wasn't very likely."

"Why not?"

"I'm not real sure, but it has something to do with an en-ay-virus being a *mimic*. It imitates the structure of genetic material."

"You mean, like the viceroy imitates the monarch?"

"What?"

"Butterflies, Jake. The monarch butterfly tastes awful bitter so the birds have learned to leave it alone. The viceroy imitates the colors of the monarch so the birds leave it alone too. They figure if it looks like a monarch, it must taste like one."

"Okay, country boy," Jake laughed. "I don't know about butterflies, but that sounds about right. What the virus does is imitate genetic material and insinuate itself into the chromosome."

"You mean it actually hooks up with the—"

"—It becomes *part* of the genetic message. The problem is that

the part of the message it makes up is bogus, false information."

Bill thought about that for a moment before saying, "Like a glitch?"

"Exactly. A glitch. It's like they all have this tremendous glitch in their genetic program."

"Is that what killed the adults?"

"Blakely doesn't think so. He thinks they all suffered from a massive immune reaction—or overreaction—that resulted in chemically induced psychosis, shock, coma, then death."

"You make it sound too clinical."

"There's no other way to deal with it."

"Maybe," said Bill, though he was plainly unconvinced.

Then, both of the strangely clad men looked at Geof as though scrutinizing him down to his genes. He had understood none of their conversation; nor did he understand the attention he was getting. He was content to wait there quietly. He had no impulse to flee. These two were different from the others. They behaved themselves as Geof thought grownups ought to. He did not feel threatened by them.

"You think Geof has a glitch?"

"According to Blakely, yes."

"Couldn't it be recessive or something?"

Jake shrugged his shoulders. "Why don't you face it, Bill. The boy doesn't have a chance. None of them do."

There was a pause, then, in the bleak conversation. Geof did not comprehend the bleakness or the pause. He knew only that these men were different.

"Are you gods?" he said.

A startled sound came from each of the men's speakers.

"My father said there are men who can do anything—like gods. You're not angry like the others so I wondered if you could be them."

The boy looked at them with a plea stamped on his face, wanting them to be gods. Jake and Bill had lost their voices to the childish question.

"I mean, if you're gods," said Geof, "then you can fix things, can't you? You can make them back like they used to be."

Jake, the first to recover his voice, spat out a bitter 'dammit' and turned to his torch, fussing silently with the gas nozzle.

Bill reached down and lifted Geof onto one of the tables, so that Geof's face was on a level with his own. Geof could see the man's face dimly through the window in his helmet. He did not understand why the eyes were sad. He did not want to understand.

"Geof," said the man, "we are not like the others because we are from a place far away where the disease could not reach. We are not gods. Even if we were, I do not think we could repair the damage that's been done. Things can never be like they used to be."

"No." Geof denied it.

"Yes! Too much has happened, Geof. Too many people have died. Your parents are dead. *Everyone's* parents are dead. They can't be brought back." Bill glanced briefly at his partner, then added grudgingly, "Even you, it seems, can never be the same again."

Bill reached his puffy, silver arms toward the boy, as if to console him. But Geof shrank from the slippery fabric.

"Noooo!" he said in a shrill, childish voice. "You're lying!"

Geof held both of his small fists clenched in front of him. He seemed ready to strike out at Bill. His lower jaw was protruding pugnaciously, perhaps to disguise the trembling of his lower lip.

Again, Bill stretched out his arms to the boy, saying, "Geof, believe me, I'm telling you the truth."

"You're lying!"

Suddenly, Bill had thirty kilograms of fury on his hands. He tried to close his arms around Geof's arms, to hold him still. But he squirmed free of the slippery fabric and rained surprisingly hard blows against his chest.

"Stop it!" he shouted, but the shouting overloaded his speaker. All that came out was a brittle static.

As abruptly as the attack began, it ceased. Bill felt the boy's body stiffen in his arms. Carefully, he settled him back upon the table. He muttered a curious "What the hell?" as the boy's breathing began coming in short, painful gasps. When Geof's eyes rolled slowly upward in their sockets, the battle began in earnest.

He clattered his head against the hard tabletop twice before Bill was able to surround his upper body with his arms, cushioning the skull from damage. But the torso and legs writhed and kicked uncontrollably.

"Jesus!" said Bill. "Give me a hand here, Jake. Grab his legs."

With a startled curse, Jake dropped what he was doing and parried a number of kicks before wrapping his arms securely around the boy's legs. Geof's shirt had worked its way up to his armpits, leaving his torso bare as it heaved and tossed between the two men.

"What the hell happened to him?" said Jake.

"Maybe this is his glitch." Bill's voice sounded a little ragged from the exertion of holding the boy.

"Maybe. Or maybe he's epileptic. Don't let him swallow his

tongue."

With both hands needed to hold the boy's head and shoulders, Bill wasn't certain how he could prevent that. Even as he worried about it, though, the tremors that wracked Geof began to subside, slackening in frequency and severity until he hung limp and still between them.

"Is he alive?" asked Jake.

"Yeah, he's still breathing."

They both lifted the boy onto the tabletop.

"No," said Bill at once. "Let's put him on the floor. He looks too much like a specimen laid out on the table that way."

Jake muttered something indecent about people who worried over 'niceties.' But he helped his partner lower Geof to the floor.

"We need something to cushion his head," he said.

"No. I'll hold him," said Bill who had settled on the floor and was cradling the boy in one arm. "I think he's starting to come around. You finish with the torch, Jake. We're behind schedule already."

Bill uttered this last not urgently but absently, with his attention diverted entirely to Geof. Jake saw something disturbingly familiar in his partner's manner.

"Don't get carried away with those parental instincts," he growled. "We still have to leave him when we go."

"I know that."

"What happened to trigger the fit or whatever it was?"

"He got mad, I think." There was a note of amazement in Bill's voice. He looked up at Jake who was standing. "It was the strangest thing I ever saw, Jake. He just got mad and it was like a big fist grabbed him and started shaking."

"Yeah. I saw."

"You suppose this has any connection with the way the adults seemed to have temper tantrums before they died?"

"Maybe." Jake shrugged his shoulders. "Like I said, it's not my field."

"He's a *human being*, Jake!" It was as though a floodgate had finally rotted through, letting the anguish of the past few weeks rush into Bill's voice. "Or isn't *that* your field either?"

Jake whirled on Bill, proving that his floodgates, too, were weakening.

"—My *field*, and your field too, is inside that cooler! The only thing we have any right to worry about is the osteonase. There are two hundred and fifty people back home who have a fighting chance if we bring it to them. Here, there are only children who we can't

help! Do you hear me, dammit? We can't help them!"

Bill had extended a second arm protectively around Geof, as if to shield him from the assault of Jake's words. It was an inadvertent gesture, but its significance was lost on neither man. Now, he withdrew that arm and cradled the boy only in his left. He tapped his helmet with a finger of his free hand.

"Up here, Jake, I know you're right. But I just can't be the cold fish that you are." He struck a blow with his hand on the tile floor. "I can't help thinking about all the other kids who must be hiding in these buildings. They must be scared and hungry and some of them sick. And there's nothing to do for them. It's like this is a second, unfair punchline to a joke that was awful the first time I heard it."

"Or," said Jake quietly, "it's like being awakened twice in one night by the same nightmare, finding yourself screaming the first time in terror, the second time in pity."

There was silence then. Geof stirred feebly against Bill's arm. The man glanced at the boy's face, then up at his partner.

"I didn't mean that you don't have feelings, Jake. It's just that you control them better than I do."

"I knew what you meant. It's okay," said Jake as he turned back to the cooler door. He started to work with grim efficiency, igniting the slim finger of flame with a sudden popping sound. The fire sizzled and bit into the bright metal, adding a glitter of actinic light to the cool fluorescence of the overhead fixtures.

Bill retrieved the pair of goggles from where they had fallen on the floor. He nudged Geof gently until his eyes opened and looked at him. They were bloodshot and seemed out of focus.

"How you feeling?"

"My head hurts," said Geof hoarsely.

"Here. Put these on." Bill fastened the goggles around the boy's head and adjusted the strap. "There, now you can watch the torch."

But Geof hardly seemed interested in the torch. He nodded weakly and was still.

"I think the boy's gonna be alright," said Bill. "He's just awful tired."

Jake didn't attempt to answer that above the snarling of the torch.

"You know the time I spent with Shansi, Jake, when I missed the last meeting?" Bill paused as though expecting a response from his partner. When none came, he continued anyway. "You know what she called that, Jake? She said, since I was going where there was

so much death, that I needed a life inoculation. That's what she called it. Said she was inoculating me with life."

"An inoculation?" growled Jake. "First time I ever heard it called *that*."

"What?"

Jake pulled his torch away from the door and eased back on the flame. He looked at Bill. "Just who," he said, "was inoculating who?"

"Ah, you're a vulgar bastard. You know that?"

"Yeah, I know that." Jake chuckled as he turned up his torch again.

"Shansi's quite a girl, Jake." Bill raised his voice to be heard above the cutting sound. "You'd like her. We've got a bit of a problem though. At least we did before all this mess down here. She's with Colonel Purlman's section and they were scheduled to make a move over past the terminator in about a month. Maybe they won't go now. I mean, astronomy doesn't look like such a priority item anymore, does it?" There was no answer from Jake, only the steady crackling and snarling. "Lord, I hope they don't go. The way things are now, I couldn't stand not seeing her for a month at a time."

"Don't worry about it, kid," Jake raised his voice. "The calendar's been cleared for the next six months. Everything's on standby now. Purlman's group isn't going anywhere."

"Where'd you hear that?"

"I had time to scan the late graphics while I was waiting for you to show up at the terminal."

"Believe me, Jake. I *am* sorry about that. It won't happen again."

"Forget it, Billy. Never let it be said that Jackson Cays ever stood between a young man and his flu shots."

"Huh?"

"Your inoculation, dummy."

"Oh, yeah."

Jake sat back on his heels and turned off the torch for a rest.

"If you hadn't wasted all that time exercising your jaw," he said, "I'd have this done by now."

He had sliced out three sides of a fairly regular rectangle, measuring roughly one meter by a half. The steel was blackened where it had been cut.

Bill still sat with Geof, who seemed to be dozing.

"Can't you just bend that piece back," he said, "and get at the lock mechanism from there?"

"No way," grumbled Jake. "The damned lock's buried in the wall. I'm going to have to pull out all this insulation and cut through the other side too." He stood up to relax his joints. "This gravity's killing me," he said. "How's the kid?"

"All that thrashing around he did must've wore him out. He's done nothing but sleep since."

Jake was performing a routine check of the girdle-like appliance at his waist. "Damn," he said. "Here's another one for maintenance. I can't get a readout for external oxygen. What's your belt say?"

Bill consulted a dial on his belt.

"I guess mine's busted too," he said.

"What!"

Quickly, Jake knelt down beside the boy. He pulled off the goggles and peered into his face. His lips were cyanotic, his cheeks sallow. Jake slapped him sharply but there was no response. He peeled back one eyelid but he could read nothing in Geof's pupil.

"—Get him out into the corridor, Bill. See if you can revive him. Our meters aren't broken and he isn't asleep. He's been gassed. This whole damned room must be filled with CO₂."

Bill was stunned. "How in the hell—"

"—Get him out of here!"

Spurred to action, Bill moved toward the door with the boy in his arms.

Jake looked at the torch that he still carried and he looked at the cooler door with three quarters of a rectangle scorched into it. Then he gazed around himself at the walls of the room.

"Stupid building," he said. "Did you think I was trying to burn you down?"

With the fire presumably smothered by the gas, the building had cancelled its alert. The doors were no longer magnetized. They stood open where Bill had raced through the waiting room and out into the corridor. Jake could see his partner with the boy, a limp mass, kneeling on the hard floor. Jake took two steps forward so that he could see over a lab table.

"Any luck?" he asked.

Bill was too busy to answer. He was anxiously pressing both hands, thumbs together in the accepted fashion, against the boy's back, then tugging on his arms. He repeated this technique several times. Finally, he stopped and shouted something at Jake. His speaker translated most of this into static but Jake understood the desperation in the man's voice. He tossed down the torch that he held in a gesture of disgust.

"Leave him, Bill," he said. "He was as good as dead already. Maybe this is the easiest, kindest thing for him."

Then, there was a sudden burst of static from Jake's speaker as he too shouted something. Abruptly, he was straining to get around the lab table, trying to reach his partner in time. His movements were underwater slow in the unaccustomed gravity.

"Don't be a fool," he hissed. "The boy's poison."

But when he reached Bill it was already too late. The latches that held his helmet in place had been undogged and pulled apart. Bill had pushed the creased silver shell back from his face. It was trying to regain its proper position, slipping repeatedly down over his eyes and nose, creating a minor hindrance as Bill covered the boy's open mouth with his own. Jake stood stiffly in the doorway and looked down on them. His partner was now irrevocably exposed to the poisonous world. He could hear Bill's voice each time that he came up for air.

"Breathe," he was saying. "Damn you, *breathe*."

Jake watched silently for a moment. Perhaps he was too stunned to speak. But when he saw the boy's chest begin rising and falling on its own, he swore softly.

"You know what you've done, don't you?"

Bill looked up at him with his eyes unnaturally wide. The helmet had fallen again into its proper position. His face, seen through the window, seemed dimmed, as though already drained of life. He laughed nervously, trying to mask what was written plainly on his face.

"Yeah, Jake, I know." He looked down at Geof. The boy was not yet conscious, but he was breathing evenly. "He's the only living human we found down here." Bill shrugged his shoulders in a helpless gesture. "I couldn't just let him die."

"You fool," spat Jake. "You probably haven't done him a favor. Odds are he'll be dead in a week anyway." Jake paused, seemingly reluctant to state what was obvious to both of them. But he did. "And *your* odds aren't even that good."

"I know. I'm sorry, Jake."

"You're *sorry*?" Jake lifted his arms in exasperation, but dropped them in defeat. Anger was the only emotion that came easily to him then. He was angry at Bill for what he had done, at himself for not stopping it, at Geof for precipitating it, at the building for causing it, at the whole world for coming to such a dismal conclusion. When he spoke, his voice was tense with anger.

"I don't know what sort of incubation period the thing has, but

you have to leave *now*. I can't take the risk that you'll go crazy and somehow keep me from getting home with the bone juice." He pointed toward the elevators. "Go on. You've got the whole damned, poisoned mess of a world to yourself. Get as far away from here as you can." He pointed at Geof. "And take the little murderer with you. You deserve each other. No discussion!" Bill had been about to say something before Jake cut him off. "I got this rule. I don't talk to fools or dead men. And you're both!"

Silently, Bill lifted Geof, who had begun to stir feebly, and turned toward the elevators. When he reached the doors, he turned again to look at his partner who was regarding them both sternly, his arms folded across his chest.

"Jake?" he said. "I gotta ask you a favor."

There was no response.

"When you get back up there, Jake, I know you gotta make a report to Ricker. And in *that* you gotta tell it the way it really happened."

Bill paused, as though expecting some reaction from Jake. There was none.

"But if Shansi comes around—and she might, Jake—please don't tell *her* how it really happened. I mean, tell her I tripped and tore my suit open or something like that. Okay? Just don't tell her how it really happened."

Jake looked at him mutely for many seconds. When at last he did speak it became obvious why he had not before. He hadn't wanted his partner to know that he was crying.

"Sure," he said, his voice breaking huskily. "I won't tell her."

"Thanks, Jake." Bill's voice was also fraught with emotion. He clutched Geof like something precious to his chest and stepped into the waiting elevator car.

A discarded newsheet, displaying the headlines of weeks before, pinwheeled along the curbing. It was caught in an early evening gust of contagion. The cloying, sick-sweet scent was intensified by the man's awareness of its source. For the first dozen or so blocks he had worn the bulky airtight suit to protect him from the smell. But he had grown warm, so very warm that his own body heat had seemed to accumulate, trapped within the silver fabric, until the suit itself appeared to swell. The buildings, too, seemed swollen, their upper stories bulging out above the street. Even the pavement underfoot had become inflated. It resembled the huge, humped back of an incredibly long snake. It glistened in the light of the occasional

streetlamp.

He knew, in his head, that the street was not really swollen, nor the buildings, nor even the suit. And he was of the vague opinion that he wasn't really hot. The gauge on his belt assured him that his suit's air conditioner was working perfectly. He suspected that the gauge was right. It was he who was out of whack, not the air conditioner.

In a lucid moment, he discovered that the suit was gone. He was wearing only his blue short-sleeved jumpsuit. He looked behind him but could see nothing that glittered silver in the darkness. He concluded that he must have discarded it several blocks before.

And he discovered that the boy was still behind him.

"Go away!" He shouted and waved his arms. "I told you that you can't stay with me!"

Unlike the man, the boy stood off to one side, as though still obeying a parental injunction to stay out of the street. His dirty brown hair, long uncombed or cut, was tossed alternately over his eyes and away again by the wind. He seemed both attracted to and repelled by the man. One arm hugged the slim post of a streetlamp that no longer worked fully. Its argon bulb glowed dimly above, illuminating itself but nothing more. A wan, other light seemed to come and go with the breathing of the wind. That came from a lamp half a block away, and from the moon.

"I want to stay with you," said Geof.

"You can't! I'll be dangerous soon!"

An excess of energy, flowing into gesticulating hands and arms and a grimacing face, kept the man's body in constant motion. His feet moved in an irregular shuffle as though he found it difficult maintaining his balance on the snake's back.

"I told you what to do, Geof. You have to search the buildings. You have to find the other children. You have to take them out of the city."

"I don't know where to go," said the boy.

The man took two stiff steps in Geof's direction. "That way!" He stabbed one arm out in the direction from which he had come. "Go in the opposite direction to the way I go. Otherwise, you're liable to get hurt."

When the man had approached him, Geof had automatically put the lamp post between them. He seemed frightened and yet drawn to the man.

He said, "I want to stay with you."

As he took another menacing step forward, the snake's back—or

the pavement—seemed to shudder beneath the man's feet, because he lurched abruptly sideways. One knee buckled. His arms gyrated like a doomed equilibrist's balancing pole. When the clumsy maneuver was completed, he was sitting flush against the curbing. Geof altered his position slightly to put the lamp post between them again. He peered around the slim column with a mystified look on his face.

"Are you alright?" he said.

"I'm *dying*," moaned the man. "I can't get less alright than that."

Geof pondered for a moment before saying, "You're like the others, aren't you?"

Bill glared at the boy with a face that looked like it had just taken a mouthful of sand.

"No," he muttered. "I'm not like the others. They're dead. *I'm dying*. There's a difference."

Geof seemed willing to accept that. He said, "Did you come from an island?"

"Huh?"

"When you said you were from a place where the sickness couldn't reach, I thought of an island."

Bill looked at Geof curiously, his head wobbling slightly on the stem of his neck.

"Yeah," he said, rubbing his eyes with the backs of his hands. "I guess you could say I come from an island." He laughed and glanced skyward. "Luan, you're a perfect island, aren't you?"

(Eighty years later, that was the mistaken name that old Geof would remember. *Luan*, island of the gods. That, too, was the name that he told the councilmen. It didn't really matter that he had it wrong. Places and things don't care what you call them.)

Curiosity had overcome caution, so Geof now stood beside the pole as he watched Bill. He said, "If it was safe, why did you leave Luan? I wouldn't have."

"Oh, Luan is far from safe," said the man as he stared at the palms of his hands. "By its nature it's a dangerous place for people. But we've tamed it mostly." He turned his hands over and stared at their backs for a moment. He seemed troubled. He glanced at Geof. "What if I said *Calcium Resorption*? Would that mean anything to you?"

Geof shook his head.

"What if I said *Osteoporosis*?"

Another shake of the head.

"What if I said a disease that saps the strength from a person's

bones? Would that tell you more?"

Geof appeared to think a minute, then shrugged his shoulders.

"I'm not sure," he said.

Bill was rubbing his hands together nervously. "It's what happens to old people," he tried to explain, "except on Luan it happens much earlier. We have children there with old bones."

Geof looked at him out of a baffled face.

"It's true," he said defensively. "I'm not raving, if that's what you think. Not yet anyway."

"How will I know when you start?"

The man clapped his hands and laughed. "This all sounds like gibberish to you, doesn't it?"

"What's gibberish?"

"It's Crazy Talk!" Bill shouted and leaned his face so aggressively in the boy's direction that Geof prudently stepped behind the light pole again.

Bill passed a weary hand across his eyes as though brushing away cobwebs. "Don't worry," he said, "I'm not going to hurt you—unless you stick around too long. I'm just trying to explain why Jake and I came here. You see, our leaders up there on Luan hired the lab back here to synthesize—that means to make—a serum or medication of some sort that would fix the calcium resorption."

The man paused again and wiped a hand across his face. The dim light left bleak hollows around his eyes. His energy seemed to be slowly draining away—like a balloon with a slow leak.

"What the scientists told us was that we could only solve our problem by recombo—like what they did with those fish people in Sumatra."

"The frog men?" said Geof, evincing a sudden interest.

"Yeah, I guess that's what the papers called them. You've heard about them?"

"My father talked about them . . ." Geof hesitated. "That was when he talked about men who were like gods."

Bill made a face like there was a bad taste in his mouth.

"Yeah. I remember," he said. "Anyway, there was a large group on Luan who wanted to be self-sufficient. They didn't like the idea of sending our women away to give birth, then waiting while the children's bones developed in a heavy gravity. That group thought that any price—even recombo—was worth paying if we could raise our children on Luan. I guess I agreed with them, mostly because Shansi did.

"But there was another group that stood against recombo, saying

that it would take us out of the species and isolate us even more than we already were. The argument between the two groups has been going on for over two years now, and still nothing's been decided. The lab down here came up with a temporary treatment, called osteonase, that we'd have to take like a diabetic takes insulin. It wouldn't really solve the problem, but it would give us more time to argue about the other, the recombo."

Bill sat staring at his hands. His voice had become a dreary monotone.

"But, before they could ship the stuff—what Jake calls the bone juice—to Luan, we got this strange report that Buenos Aires had gone crazy and died." Bill gave a short laugh. "That's all it said. There weren't any details. I guess they were trying to keep it quiet until they could figure out what had happened. There were a lot of rumors—but there always are a lot of rumors running around Luan. None of us gave it much thought until two days later when the reports began coming in as regular as heart beats. First Buenos Aires, then Capetown and Rio and Kinshasa and Miami and Madrid." Bill still stared gloomily at his hands. "At first we thought it might be some new kind of war going on, but it became clear early that if it *was* a war, then humanity was losing. I guess some big shots down here thought it was war too, because they ordered us to deploy our tactical nukes. Luckily, our leaders ignored that. Instead, they slapped a quarantine around us, cancelling all shuttles, and we waited." Bill looked at Geof with elements of grief and guilt lighting his eyes dimly. "What else could we do?" he asked. "We couldn't help anyone here. All we could do was save ourselves."

As he spoke, Bill had gradually reclined. Now he was nearly supine with his shoulders propped up by the curb. He held his hands before his eyes, examining them curiously. Then he let them drop wearily to his sides.

"The rest of it's simple," he said. "When the dying was over down here, seven teams came down to seven cities to pick up things that we didn't have on Luan—things we had to have to survive. Jake and I were the team that came down for the bone juice." He stopped, then added, seemingly as an afterthought, "We were all expendable personnel."

He seemed enormously tired. He barely had enough strength left in him to lift his hands and look at them. He frowned and turned on his side. He looked at Geof.

"Find the other children, Geof. Take them out of the city. It doesn't matter where—just away from here."

Then, Bill closed his eyes and nestled his cheek against the concrete curb as if it were as soft as any pillow. Geof thought he was asleep. But, after a moment, he roused himself and lifted up on one elbow.

"I don't want to hurt you," he said, "But if you're here when I wake up I might, Geof. So don't stick around." He paused and looked at his hands again. "There's something I need to know before you leave." He raised his hands for Geof to see. "What color are they?"

This seemed no sillier than the other things Bill had said. Geof peered around the light pole at the man's hands.

"It's dark," he said. "I can't tell."

"You mean they don't look red to you?"

Geof looked again.

"Maybe a little."

"No, no," moaned Bill. "Not a little red. They're godawful red, aren't they? Like cherries or like red roses in sunlight?"

That scared Geof. He clutched the pole tightly with one arm.

"You don't see it?"

Geof shook his head.

"Oh my Jesus, it must be starting," he moaned as he curled into a semi-fetal position with his hands clenched before his face. "Go away," he said, pressing his cheek against the concrete. "Let me sleep. Let me die."

But Geof did not go away.

It was still dark. Geof's stomach complained that it had not been fed since morning. The wind hissed between the buildings, coming steadily out of the west. It seemed to bear toward them a change in the weather. The dawn would find the gutters filled with rain. Bill lay face down on the pavement, snarling.

Geof thought that the man was still asleep, but he could not know for certain. When delirium troubles the border between wakefulness and sleep, both nations suffer a loss of territory. In his fevered mind, Bill may have imagined himself a sharp-fanged lupine beast, prowling the edge of a piney forest. Or he may have been a frightened soldier at Verdun, preparing for a bayonet charge by raising a feral growling in his throat. Whatever it was, it was not a sane sound that Bill was making, nor was it pleasant.

When the snarling began, Geof had retreated considerably from his position behind the light pole. He was now many meters distant with his back propped against the bricks of a building. He would not sit down for fear that he would fall asleep. He wanted to make

certain that he was awake and mobile when Bill revived.

Why did he stay? Of that he wasn't certain himself. It was a sort of clinging, a cleaving to this man who, only hours before, had represented normalcy to Geof. That he was now far from normal wasn't reason enough to abandon him. Also, there was a certain dreary fascination to Geof's watching. A melancholic, empathetic, humane circuit had been fired in the boy's mind. This watching, like a deathbed vigil, seemed a natural thing for him to do.

Words had begun to take form within Bill's snarling, though little of what he said carried meaning for Geof. Seldom were any two of these words arranged to make consecutive sense—and even then it may have been an accident, a random noun followed by a chance verb followed by a place—a monkey slapping out sentences on a typewriter. Or what he said may have followed his mental topography; if so, it was a rough terrain. He spat out gullies filled with curses. He moaned oceans of trembling sibilants. He shouted rivers of objectless verbs. He called out a forest of names (names meaningless to Geof, who could never know the people they described). He choked on syllables of hate and coughed up a thin string of bile onto the pavement.

As this verbal landscape was taking shape, an energy seemed to gather in Bill's body, manifesting itself at first by vague twitchings and slow writhing, but later by frantic swimming motions. Eventually, Bill reached a stage in his strange, psychotic exodus where he propped himself up with his left arm and seemed to stare angrily at a single spot on the pavement. With terrible suddenness, he began slugging that spot with his balled right fist.

Geof winced and turned his head away. He knew that the popping and cracking he heard was not the sound of the pavement breaking. Somehow the disease had disarmed his synapses. The message of agony was not reaching Bill's brain.

When the frightful sounds stopped, Geof turned quickly to see what was happening. What he saw made him wary and sick.

Bill was struggling to rise to his feet. Unaware of his own injury, however, he was relying on his right arm to lift himself. Each time that he tried, fractured bone and torn muscle would fail him and drop him to the bloody pavement. The sight might have been comical had it not been so grisly. His right elbow had been dislocated and the ulna was driven through the flesh. The front and side of his blue jumpsuit were stained dark where he had fallen and rolled in his own blood.

Geof made himself small against the building, feeling the smooth

cold bricks against his back and arms. He prayed that the man would not notice him. For Geof, this was a grim reprise of the things he had witnessed weeks before. He flexed his knees, preparing them for flight. He kept his eyes on the dying man.

Somehow, Bill had managed to get his feet beneath him. He staggered up in the noxious air like some poor ravaged creature out of Goya. His right shoulder was lifted above the left. His ruined right arm hung at his side. He had wounded himself in many other places while thrashing around. In the darkness, all the blood appeared black. His left eye and cheek were black. His chin was black. There was a black smear across his forehead.

He was talking again. Now, however, his voice contained awareness and his words were comprehensible. In a way, this was more terrible than the gibberish he had spoken earlier. It was hateful to think that there was still a thinking human being suffering inside that distempered creature. It would have been more comfortable to believe that he had become a mere collection of tortured muscles and dying organs without consciousness. It would have been more comfortable, but it was not so.

Bill was still a member of *Homo sapiens*, albeit a dying member. "Jake?" he said, his voice a frightened whisper as he looked around. His left eye was swollen shut and glued with blood. But the right was opened wide with terror. He turned slowly and awkwardly around and around, searching for something in the windows of the buildings.

"Jake?" he repeated in a louder voice so that the name echoed up and down the urban canyon. His chest was rising and falling erratically beneath the bloodstained fabric of his jumpsuit. He seemed to detect something in the shadow of a doorway. He took a step toward it.

"Shansi?"

He listened for a moment, but only the wind answered him. The air had grown cold and heavy. Clouds blotted out the stars above. An expression of excruciating pain distorted the man's mottled features. He stared suddenly and accusingly at the tops of the buildings.

"Jackson Cays!" he bellowed. "Get your black ass out here!" He looked straight above into the invisible clouds. "The joke's over!" he screamed. "I want to go home!"

This outburst ricocheted off the metal and glass surfaces around him, so that it was several seconds before the steady hiss of the wind could be heard again. The man turned around three times and listened. But there was nothing more to be heard. Then he cried out

again and again until his throat was raw and his voice hoarse. When he could shout no more, he stood hunched over and gasping for air. He had not quite recovered his wind when he spotted Geof.

"You," said the creature in a sandpaper voice, fixing the boy with its one good eye. "You did this to me." Outraged, the monster that had once been Bill stared murderously at Geof as if it could harm him simply by staring. Then it started in Geof's direction, traveling in an unbalanced, shambling gait.

The boy seemed mesmerized by the creature's single, glittering eye. He stood as though riveted to the bricks of the building. The chill, wet wind stirred the hair on his head and rippled the torn cloth of his shirt, but it could not move his eyes away from the approaching apparition's face. Besmirched and contorted, it seemed like the face of Hell's own representative on earth. Death Incarnate, making a noise in its throat and showing its teeth, was closing on Geof and he could not move. He could not even breathe.

"Murderer," rasped the monster when at last it stood above him. It stank of blood and sweat and hate. The entire right side of its body began to convulse spasmodically. The ruined right arm swayed harmlessly. The mask of hate that it wore gave way to one of bewilderment. In the bleary, painless, half-dead world where the creature now dwelt, it imagined its right arm to be intact. Yet, try as it might, it could not manage to strike Geof with that fist. Baffled, the monster emitted a roar of frustration and loathing as it raised its left fist above Geof's head.

The berserker yell was enough to knock Geof from his trance. With a scrambling of small feet on pavement, he dashed away parallel to the buildings. He stumbled and fell. He rolled and came up running. He did not look back.

Behind him, the dying monster screamed.

"Murderer!"

The sound echoed down the concrete ravine.

Finally, the rain began to fall.

The old man had added a soft leather jerkin to his linen tunic. The sun had turned red and oblate as it dropped into the western horizon. The air was cooling rapidly. The old man imagined he heard a faint, faroff hissing sound as Sol met the western sea. He chuckled at his own whimsy. He knew the sun was a very distant thing that could never touch the water. He knew that it was a mammoth thing, larger than the earth, and that only its distance made it seem small. And he knew about Luan.

He had chuckled when Hink Bardo, the riverman, had vowed that his men and he would sail the vast ocean to find the island, Luan, wherever it might lie.

"Ah, little captain," said the old man to himself. "If the great madness could not reach Luan, how can you?"

All the other councilmen had been struck silent by the old man's story. They had always believed the old city to be haunted, but they had never known with what. They left, mumbling their thanks, returning to the rude village to find an apprentice storyteller. They did not leave with the same fervor for the task that they had shown when they arrived.

The old man had been right. It was not a story for children.

In the twilight, without the company of the children, Geof Tal-mund felt the cool loneliness of night creeping in. He grew philosophical, reflecting on his own life and on the lives of the river people.

"Yes," he murmured, "my life has been like a simple rainbow. A many-colored arc, falling as gently as it rose. And the children? Their golden haze meets my yellow fog and forms a . . . what? Not a circle." The old man shook his head. "For we can never come full circle. Instead, we must form a spiral." Old Geof made a corkscrew motion with an index finger, stabbing the air in front of him. He smiled. "Yes, our lives mingled form a spiral, winding down through the ages."

It did not occur to the old man to call that a helix.

He sat quietly for many minutes. The night had grown perfectly black. He felt a curious contentment as he listened to the river sounds that rose through the cool air from far below. There was the gurgle and plink of water as it made its way toward the sea and the gruff, self-satisfied *hur-mph* of a bull frog. Occasionally, a sound would reach him from the village. A door would open or close creakily. A mother would call out in a tiny, faroff voice, scolding a child, or a husband. As he listened, the old man imagined all the lives below him as rainbows taking shape and for a moment in his mind he saw the world as a circus of colliding colored light.

He closed his eyes then to improve this vision. When he opened them again, there was a shadowy, sylphlike creature moving noiselessly on the path. It stepped into his yard and the old man heard the hiss of its feet brushing through the tall grass. By that sound, he knew that it was real and not a vision. It stopped a few meters from him. There was no moon yet to see clearly by, but the old man was familiar with the creature's size.

"You are out late, child. Do your parents know?"

"My parents weren't home to ask."

Geof recognized the musical voice of the girl, Wendy.

"Oh?" he said. "Where have they gone?"

"Up the big hill," she said, and she might have pointed across the river toward Riverbend Hill though Geof could not be certain in the darkness. "Once a week they go up the hill at night. They come back in the morning."

Geof smiled, recognizing this as one solution to a young couple's problem when raising a small child in a one-room frame house. Some nights they must spend together, alone.

"They left no one to watch you?"

"Only grandmother. But she was sleeping, and I didn't want to wake her. She sleeps so poorly these days."

"What is so important," said Geof, "that you could not wait until morning to tell me?"

"I wanted you to know that I still remember the story from this morning."

The girl obviously had something more on her mind, but Geof was not one to press an issue.

He said, "I expected all of you back in the afternoon. I would have finished the story."

"We had to stay inside this afternoon."

"A punishment?"

"Yes. Rory and Joshua got into a fight and they both had the shaking sickness." There was a note of disapproval in her voice.

"Are they alright now?"

"I don't know." Her tone made it clear that she could not care less about the two roughnecks. "They had to stay inside like everybody else."

"Ah, poor Wendy," said the old man. "It has always been so. The innocent are punished along with the guilty."

"But it wasn't fair to make the rest of us stay inside too."

"Fairness," said the old man, though he had little hope that she would understand, "is not a principle of the universe. It is a principle peculiar to Man. And, like Man, it sometimes fails."

She worked on that silently for a moment as a chill breeze lifted the elm's branches. The moon had risen above the eastern hills and the west wind seemed to be working against it, trying to impede its progress across the sky. It threw clouds against it and shook the trees at it angrily.

"Why did the Council visit you?"

Geof thought about that for a moment as he watched the movements in the sky.

"They came to hear a story," he said.

"Which one?"

"It was one that you haven't heard," said Geof. "It was a story for grownups."

"You mean you won't tell it to us?"

The old man looked at the girl. The fragile moonlight gleamed on her cheek, illuminating a puzzled frown.

"No," he said, "I will not tell it to you. But when you have grown into a woman with children of your own, then you may hear it. There will be another storyteller then, a younger one. Ask him for the story of the island man. He will know which one you mean."

"The island man," said Wendy quietly. "I will remember."

"You better go home now, before your grandmother wakes to find you gone."

She turned to go, but took only two steps before turning back.

"Sir?"

"Yes, dear?"

The thin shift that the girl wore offered little protection from the night air. Wendy hugged her slender arms around herself and dug her toes into the grass, searching for the warm soil beneath.

She said, "I told my mother that you called me Wanda."

"And?"

"She cried."

"I'm sorry."

"Oh, she wasn't sad," the girl added quickly. "I think it was just the other way. I think it made her happy."

Geof nodded. He had experienced nostalgic tears before.

"In fact," the girl smiled mischievously, "I think *that* was the reason she and father climbed the hill tonight. I don't think they planned to go before I told her."

Geof grinned sheepishly, somewhat abashed at the consequences of his simple mistake. He lifted his eyes across the valley toward the broad dark mass of Riverbend Hill. It was somehow pleasing to know that a ritual as old as the species was taking place there now, even as he watched. He turned his eyes away, giving them back their privacy.

"Thank you, Wendy," he said. "Go home now, before you catch cold."

She left, moving noiselessly on the moonlit path, then disappearing into the shadow of the trees.

Geof Talmund sat for a while longer on his front stoop, watching the moon battle its way across the sky. The wind in the trees made a sound like distant surf. A seashell sound. The river continued its glide to the west. When it grew too cold, Geof clutched his kidsoft jerkin around him and went inside to his bed of straw.

An old man at the end of his rainbow.



THE BAGEL HEADS HOME

by Martin Gardner

The Bagel's back!

When the spaceship *Bagel* returned from its mission to Titan (see May 1980's puzzle story), it went first to the U.S. Moon Base for repairs. Two weeks later it was on its way to the Earth from the moon.

Ronald Couth, who headed the *Bagel's* computer crew, was playing a game of Go with VOZ, the ship's computer, when his daughter Tanya, now 12, entered the computer shack. "I just noticed something unusual," the girl said. "First I looked at the Earth through a front window. Then I went to the back of the ship and looked at the moon. They look exactly the same size!"

Colonel Couth smiled. "Of course you know there's just one spot along the way where that happens, and locating the spot on a chart is a good exercise in geometry. To simplify the problem, let's round off all the relevant dimensions. Assume the distance from the moon's center to the Earth's center is 240,000 miles, the Earth's diameter is 8,000 miles, and the moon's diameter is 2,000 miles. Do you think you can figure out how far we are now from the moon's center?"

Tanya, who loved geometry problems, had no trouble with this one. For the answer, turn to page 91.



THE SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

Now that you're home for the holidays, it's a good time to plan for social weekends you'll have this Spring at con(vention)s with your favorite SF authors, editors, artists and fellow fans. For a longer, later list and a sample of SF folksongs, send me an addressed, stamped envelope (SASE) at 9850 Fairfax Sq. #232, Fairfax VA 22031. The hotline is (703) 273-6111. If a machine answers, leave your area code and number CLEARLY and I'll call back. When calling cons, give your name and reason for calling right away. When writing, enclose an SASE. Look for me as Filthy Pierre.

ChattaCon. For info, write: Box 21173, Chattanooga TN 37421. Or phone: (615) 892-5127 (10 am to 10 pm only, not collect). Con will be held in: Chattanooga TN (if location omitted, same as in address) on: 16-18 Jan., 1981. Guests will include: Gordon (Dorsai) Dickson, Barry (Enemy Mine) Longyear, W. A. (Bob) Tucker, Forrest J. (Famous Monsters) Ackerman.

LastCon, c/o Connell, 50 Dove, Albany NY 12210. (518) 434-8217. 23-25 Jan. Hal (Mission of Gravity) Clement, Jan Howard Finder. Masquerade, banquet and name-the-alien contest.

UnnamedCon, LBSFA, 729 E. Willow, Long Beach CA 90806. 23-25 Jan. Pro Ghost of Honor: C. S. Lewis. Fan Guest of Honorship to be auctioned. Films on hotel TV's. Sounds . . . unusual.

Confusion, Box 1821, Ann Arbor MI 48106. (313) 485-4824. Plymouth MI, 23-25 Jan. Barry B. Longyear, Dave Innes, Gay Haldeman. Masquerade, snow sculpture contest, 24-hour parties.

AquaCon, Box 815, Brea CA 92621. Anaheim (Disneyland) CA, 12-16 Feb. Philip Jose (Riverworld) Farmer, William Rotsler, Jan Bogstad and Jeanne Gomoll of JANUS. Masquerade.

CapriCon, Box 416, Zion IL 60099. Evanston IL, 20-22 Feb. Terry Carr, editor of Universe.

Boskono, c/o NESFA, Box G, MIT PO, Boston MA 02139. 13-16 Feb. If they survived NorEasCon.

StellarCon, c/o Allen, Box 4-EUC, UNC-G, Greensboro NC 27412. 27 Feb.-1 Mar. Masquerade. Participation by the S. C. A., who live mediievally (e.g., leaders chosen by combat).

WisCon, c/e SF3, Box 1624, Madison WI 53701. (608) 223-0326. 6-8 Mar. Chelsea Quinn Yarbro, R. & J. Coulson, D. & E. Wollheim, T. DiLauretis, S. V. Johnson. Feminist emphasis.

FanCon, c/o The Alliance, Box 1865, Panama City FL 32401. 6-8 Mar.

CoastCon, Box 6025, Biloxi MS 39532. (601) 374-3046. 13-15 Mar. Jerry (Mote in God's Eye, Lucifer's Hammer) Pournelle, G. A. (Relations) Effinger, Jo (Diadem) Clayton, the Pinis.

UpperSouthClavo, Box U122, College Heights Station, Bowling Green KY 42101. 13-15 Mar.

MarCon, Box 2583, Columbus OH 43216. (614) 497-9953. 13-15 Mar. Andrew J. & Jodie Offutt, Bob & Ann Passovoy. This con is legendary among long-time fans. Intimate atmosphere.

FooiCon, c/o JCCC, Overland Park KS 66210. 3-5 Apr. Kurtz, Cherryh, Asprin. Abbey, Kirk.

YorCon, c/o Jamos, 12 Foarnville Torr., Oakwoods, Leeds LS8 30U, United Kingdom. Tel.: Leeds (0532) 721428. 17-20 Apr. 32nd British EasterCon. Watson, Langford, T. M. Disch.

WestorCon 34, Box 161719 Sacramento CA 95816. 4-6 Jul. C. J. Cherryh, Grant Canfield.

Convention II, Box 11545, Denver CO 80211. (303) 433-9774. 3-7 Sep., 1981. C. L. Moore, C. Simak, R. Hevelin, Ed Bryant. The 1981 World SF Con. Join before rates go up any more.

WosterCon 35, Box 11644, Phoenix AZ 85064. (602) 249-3111. 2-5 Jul., 1982. Gordon Dickson.

ChiCon IV, Box A3120, Chicago IL 60690. 2-6 Sep., 1982. A. Bertram (Rim Worlds) Chandler, Kelly Freas, Lee Hoffman. The 1982 World SF Con. Join in 1980 for \$20 and save \$10.

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1934
**ROBOV
NOVELS**

by James Gunn

an Alex Schomburg



This, the author's third article on Dr. Asimov's fiction to appear in our magazine, stems not from our urge to self-aggrandizement but from the author's upcoming book on the subject, to be published in 1980 by the Oxford University Press.

On other fronts, a new novel, The Dreamers, will be published by Simon & Schuster in 1980.

The Caves of Steel was serialized in *Galaxy* in 1953, published in hardcover by Doubleday in 1954, and published in paperback by New American Library in 1955; *The Naked Sun* was serialized in *Astounding* in 1956, published in hardcover by Doubleday in 1957, and published in paperback by Bantam Books in 1958. They were brought together in the hardcover edition with *The Rest of the Robots* published by Doubleday in 1964. More recently they have been printed together by Doubleday under the title by which they are better known, *The Robot Novels*. Asimov, however, calls them "science fiction mysteries." Whatever they are called, they represent Asimov at the peak of his science fiction powers.

Asimov describes *The Caves of Steel* in almost those exact terms in Chapter 55 of Part I of his autobiography, *In Memory Yet Green*. The chapter itself is entitled "Science Fiction at Its Peak," and Asimov goes on to write:

I was very proud of the stories I was writing now. It seemed to me that they were much more deftly written than my stories of the 1940s. I think so to this day.

It seems to me that most people associate me with the 1940s and think of the positronic robot stories, the *Foundation* series, and, of course, "Nightfall," as the stories of my peak period. I think they're all wrong. I think my peak period came later—in 1953 and the years immediately following.

By now, after all, the pulpishness in my writing had completely disappeared. That had been taking place all along, through the 1940s, but between what Walter Bradbury taught me and what I had learned at Breadloaf, the change accelerated under my own deliberate prodding.

My writing became ever more direct and spare, and I think

JAMES GUNN

it was *The Caves of Steel* that lifted me a notch higher in my own estimation. I used it as a model for myself thereafter, and it was to be decades before I surpassed that book in my own eyes.

What had happened to bring Asimov's capabilities to fruition? Partly, one can guess, it was experience: Asimov had been writing science fiction for fifteen years and getting it published for fourteen when he began work on *The Caves of Steel*. Some writers, such as Edgar Rice Burroughs and A. E. van Vogt, begin writing at the top of their form and never do it much differently; others, like Robert A. Heinlein and Theodore Sturgeon, continue to improve until they attain full command of their writing skills and their creative drives. For writers like the latter, the process seems to take about ten years, more or less, depending perhaps upon the age the writer begins to publish and upon the amount of writing done. Heinlein, for instance, started writing in 1939 at the age of thirty-two, and came into his mature period in 1949; the first adult novel in which he demonstrated his integrated abilities was published in 1952 (the year before *The Caves of Steel*), *The Puppet Masters*. Asimov, who was only eighteen when he went to see John Campbell for the first time and nineteen when his first story was published, was thirty-three when he began writing *The Caves of Steel*.

Asimov also was gaining confidence as he gained maturity. He had become a successful author in many ways. Instead of creeping, "pallid and frightened," into Campbell's office to sit at the great editor's feet, he now was able to breeze into the office of any science-fiction editor in New York and "expect to be treated as a celebrity." His science fiction was beginning to appear in books with regularity, and he had some assuredness that every novel he wrote would be published as a book. *I, Robot* and *Pebble in the Sky* had been published in 1950; *Foundation* and *The Stars, Like Dust*, in 1951; *Foundation and Empire* and *The Currents of Space*, in 1952—two books a year, alternating between Doubleday and Gnome Press—and his "Lucky Starr" juvenile novels, written under the pseudonym of Paul French, were beginning to appear from Doubleday, *David Starr: Space Ranger* in 1952, and *Second Foundation* and *Lucky Starr and the Pirates of the Asteroids* were in process for 1953. His first scientific book, *Biochemistry and Human Metabolism*, which was neither particularly satisfying (because it was a collaboration) nor particularly successful but would show the way to the future, had been published by Williams & Wilkins in 1952, and he had com-

pleted a non-fiction book on his own, first called *The Puzzle of Life* and then *The Chemistry of Life*. Two publishers had rejected it, but he knew now that he could write non-fiction, and another publisher had approached him to do a book about science for teenagers.

He had gained confidence, as well, in worldly ways. He had been promoted to assistant professor at the Boston University School of Medicine at the end of 1951, and he was beginning to think of himself as a writer rather than the research chemist he had considered himself the last dozen years. He had earned \$1,695 from his writing in 1949; more than \$4,700 in 1950; \$3,625 in 1951; and "an astonishing" \$8,550 in 1952; the last was half again as large as his university salary of \$5,500. He had \$16,000 in the bank; he owned his own car; he and his wife had a son, now two years old; and they were thinking about buying a house.

He had matured in other ways. His social insecurity, particularly with women, had eased with success, and he had adopted a Rabelaisian approach to all women of all ages—he called it "his all-embracing suavity." He had even enjoyed his first extra-marital encounter and had acquitted himself well.

What was the novel that was the focus of all these maturing influences?

The Caves of Steel is placed in a time about three thousand years in the future. Earth is a homogenous society of eight billion people who live in Cities of twenty million population or more; the open country outside the Cities is given over to agriculture and mining performed entirely by robots. Earthmen, as Asimov calls them, have worked out efficient systems of living and supplying the necessities of life and accommodating themselves to the pressures of everyday existence. On fifty other inhabited planets, however, live the Spacers, once settlers from Earth but now quite different: they live for up to 350 years, are free from infectious diseases, restrict their births not only in quantity but quality, and are few in numbers but militarily powerful because they have many machines and robots and depend upon interstellar travel. Upon previous occasions they have sent down their "gleaming cruisers from outer space" into Washington, New York, and Moscow to collect what they claimed was theirs. They have constructed a "Spacetown" adjacent to New York. In Spacetown a Spacer has been murdered.

The plot revolves around the investigation of that murder by Elijah Baley, a C-5 rating detective on the New York City police force, who is forced by the Spacers to accept as a partner a humanoid robot, R. Daneel Olivaw.

The novel originated in a suggestion by Horace Gold, editor of *Galaxy*. Gold had serialized *The Stars, Like Dust* (under the title—Asimov thought it ridiculous—of *Tyrann*) beginning in the fourth issue of his new magazine. Campbell, however, had published *The Currents of Space*, Asimov's subsequent novel, in part at least because Asimov felt guilty about the fact that six of the first eight issues of *Galaxy* had contained Asimov fiction. Now Gold wanted Asimov's next novel. He suggested a robot novel. Asimov at first didn't want to do it; he didn't know if he could carry a whole novel based on the robot idea. Gold suggested an overpopulated world in which robots were taking over human jobs; Asimov thought that was too depressing and wasn't sure he wanted to handle a heavy sociological story. Finally Gold suggested, in view of Asimov's liking for mysteries, that "he put a murder in such a world and have a detective solve it with a robot partner. If the detective doesn't solve it, the robot will replace him."

In his autobiography Asimov recalled that "when I wrote it, I did my best to ignore this business of robots replacing human beings." That fear was what *I, Robot* had ridiculed; the difficulties of introducing robots on Earth was caused by fundamentalist religious groups and labor unions, and prejudices against robots were voiced by silly, ignorant, or malicious people. Asimov's resistance to the concept was understandable. If the novel was to work, however, much of the philosophic, even historical, development of the robot in *I, Robot* had to yield to new imperatives. Every person, even sensible persons such as Baley, had to be anti-robot, and yet robots had to be common enough on Earth for Earth people to fear that they might take over human jobs. After "Robbie" in *I, Robot* Asimov had never allowed robots openly on Earth. This may explain, in part, why Asimov placed *The Caves of Steel* so far in the future. Asimov further rationalized the use of robots on Earth by placing responsibility on Spacer pressure. As for robots replacing human workers, "that was typically Gold and not at all Asimov," Asimov continued, "—but Horace kept pushing, and in the end, some of it was forced in; but not nearly as much as Horace wanted."

If Gold was bad with titles, he was at least as good with ideas as Campbell. He gave Frederik Pohl the idea for "The Midas Plague" and Alfred Bester the idea for *The Demolished Man*, which became a turning point in Bester's science fiction career. Now he gave Asimov the idea for what may, with some justice, be called his best science fiction novel. What pleased Asimov most about it, however, "was that it was a pure murder mystery set against a science fiction

background. As far as I was concerned it was a perfect fusion of the two genres, and the first such perfect fusion. A number of people agreed with me in this." *The Demolished Man*, which is a murder mystery and, in a sense, a detective story, appeared in *Galaxy* eighteen months before *The Caves of Steel*, but it is clearly not a formal mystery. Murder mysteries have been published in which science fiction played a part: Anthony Boucher's *Rocket to the Morgue* (1942), for instance, or Mack Reynolds' *The Case of the Little Green Men* (1951). Scientific detectives were common earlier in the century, such as R. Austin Freeman's Dr. Thorndyke. Sam Moskowitz devoted a section of his *Science Fiction by Gaslight* to "Scientific Crime and Detection," including stories such as L. T. Meade and Robert Eustace's "When the Air Quivered" from *The Strand Magazine*, December 1898, and Warren Earle's "In Re State vs. Forbes" from *The Black Cat*, July 1906. Moskowitz also cited Edwin Balmer and William B. MacHarg's *Luther Trant, Psychological Detective* and Arthur B. Reeve's *Craig Kennedy*.

But none of these was like *The Caves of Steel*. The murder mystery and the subsequent attempt to unravel the mystery and discover the murderer function as the central structure around which all the other events arrange themselves. Baley is assigned to the case by an old friend, Julius Enderby, the Commissioner of Police, because the situation with the Spacers is so delicate and he can trust Baley's discretion. Moreover, Baley's loyalty and sense of duty register so high that he can be relied upon to work with a robot.

The case is complicated by the fact that entry to Spacetown is controlled by the Spacers, who put every entering Earthman through a decontamination process that Earthmen consider demeaning. No weapon could be sneaked into Spacetown. Daneel, however, has a possible solution: the Spacer was killed by a group of conservatives, who call themselves Medievalists, who want Earthmen to return to a simpler way of life and who resist the introduction of robots. Daneel points out that one of them could have left New York from one of the hundreds of ancient exits and could have reached Spacetown with a weapon by crossing open country. Baley says that is impossible for an Earthman; conditioned by life within the City, he could not cross open country for any reason. A robot, on the other hand, could cross open country but could not kill because of the First Law.

As in every well-made murder mystery, Baley considers a number of suspects and possible explanations. Because Daneel has been constructed to resemble his maker, the murdered Spacer Roj Ne-

mennuh Sarton, Baley at first accuses Daneel of being Sarton, but Daneel proves he is a robot by opening his arm to reveal his mechanical workings. Later, still desperate to put the blame on the Spacers, Baley accuses Daneel of committing the murder by hiding the blaster in his food sac, but Earth's leading robot expert, Dr. Gerrigel, finds that Daneel's First Law is intact.

Sammy, the office robot who replaced one young office worker, is found by Dr. Gerrigel with his brain destroyed. Baley, who is likely to be accused of Sammy's destruction and has only an hour or so before the Spacers terminate the case, confronts Enderby with evidence that the Commissioner himself is guilty both of Sarton's death and Sammy's destruction; he had planned to destroy Daneel, and had Sammy carry the blaster across open country to Spacetown. Enderby shot Sarton thinking it was Daneel, and returned the weapon to Sammy before the crime was discovered.

The murder and its detection, though ingenious, are not the primary interest of the novel. No one ever is worked up about Sarton's death. The Commissioner is agitated—later this becomes one clue to his guilt—but the Spacers are calm. The possible consequences are more important than the murder itself, and the consequences are science fictional. First, the Spacers have the power to inflict indemnities on Earth if they are offended; and second, the entire New York police force will be humiliated and Baley may lose his job and along with it all his hard-won status and privileges.

There are even larger consequences: a group among the Spacers, for instance, is forcing the introduction of robots on Earth in order to upset the Cities' economy and to create a group of displaced men who eventually will want to emigrate to unsettled planets. That group believes that the fifty Spacer worlds are too stable and have lost the desire to colonize new planets. Earthmen may be able to develop a new, more desirable collaboration of humans and machines that the Spacers call "C/Fe" for carbon and iron, which are the basic elements for the two kinds of human and robot existences. But other Spacers oppose the plan and may be able to seize upon Sarton's murder as an excuse to stop the effort.

Even this does not reach the heart of the appeal of *The Caves of Steel* for the science fiction reader. That resides in something more basic, and not even in the human-robot collaboration, reluctant as it is on Baley's part, attractive as it is to the reader in the contrast it presents between Baley's emotionalism and Daneel's unmoved intellectualism. (Daneel, in fact, is a kind of prototypical Mr. Spock of "Star Trek.") The basic story concerns the Cities themselves and

the people who live in them.

Dr. Han Fastolfe, spokesman for the Spacers who want to break Earthmen free of the home planet to settle some of the hundred-million uninhabited planets in the Galaxy, presents the over-riding image of the novel: "... Earthmen are all so coddled, so enwombed in their imprisoning caves of steel, that they are caught forever. . . . Civism is ruining Earth."

The Cities . . . civism . . . these concepts are what *The Caves of Steel* is all about. Asimov alternates exposition about the City and its culture with narrative about the murder investigation, complicating events, and character development. His writing skills have developed to the level of allowing each of these elements to fall naturally and unobtrusively into place. The first extensive discussion of the development of the Cities, for instance, occurs as Baley is riding the expressway toward Spacetown to meet his robot partner for the first time and thinking about the differences between Spacetown and New York, between Spacers and Earthmen:

Efficiency had been forced on Earth with increasing population. Two billion people, three billion, even five billion could be supported by the planet by progressive lowering of the standard of living. When the population reaches eight billion, however, semi-starvation becomes too much like the real thing. . . .

The radical change had been the gradual formation of the Cities over a thousand years of Earth's history. Efficiency implied bigness. . . .

Think of the inefficiency of a hundred thousand houses for a hundred thousand families as compared with a hundred-thousand-unit Section; a book-film collection in each house as compared with a Section film concentrate; independent video for each family as compared with video-piping systems.

For that matter, take the simple folly of endless duplication of kitchens and bathrooms as compared with the thoroughly efficient diners and shower rooms made possible by City culture. . . .

City culture meant optimum distribution of food, increasing utilization of yeasts and hydroponics. New York City spread over two thousand square miles and at the last census its population was well over twenty million. There were some eight hundred Cities on Earth, average population, ten million.

Each City became a semi-autonomous unit, economically all but self-sufficient. It could roof itself in, gird itself about, bur-

row itself under. It became a steel cave, a tremendous, self-contained cave of steel and concrete.

It could lay itself out scientifically. At the center was the enormous complex of administrative offices. In careful orientation to one another and to the whole were the large residential Sections connected and interlaced by the expressway and the localways. Toward the outskirts were the factories, the hydroponic plants, the yeast-culture vats, the power plants. Through all the melee were the water pipes and sewage ducts, schools, prisons, and shops, power lines and communication beams.

There was no doubt about it: the City was the culmination of man's mastery over the environment. Not space travel, not the fifty colonized worlds that were now so haughtily independent, but the City. . . .

The Cities were good.

By now the techniques that science-fiction writers had been developing to fictionalize issues, to dramatize future societies in the process of telling the story, were tools that had been invented and perfected and lay at hand for anyone who was capable of using them: the Kuttners, Henry and C. L. Moore, had used them well in the early and mid-1940s; Heinlein had mastered them; A. E. van Vogt had adapted them to his own magical purposes; and Frederik Pohl and Cyril Kornbluth were beginning to bring them to the ends of satire. But Asimov, who had participated in their development, displayed his skill in their use particularly in the Robot Novels.

He provides a host of corroborating details, both psychological and social. Codes of behavior have developed naturally around the major institutions of the Cities. The Personals, for instance, centralize bathroom facilities except for the occasional "activated" washbowl, such as Baley has in his "spacious" three-room apartment. So "by strong custom, men disregarded one another's presence entirely either within or just outside the Personals," though women used them for social purposes. The "bright cheerfulness" of the Personals is a contrast to the "busy utilitarianism" of the rest of the City. The moving strips of roadway, the expressway and the localways, become places where behavior has become traditional and where juveniles break the traditions, and the laws, by playing on them such dangerous follow-the-leader games as "running the strips." Ways of behaving in the communal kitchens have become standardized to avoid annoying others and having them annoy you ("the first prob-

lem of living is to minimize friction with the crowds that surround you on all sides"): "when you're young, mealtimes are the bright spot of the day," but "there is no one so uncomfortable . . . as the man eating out-of-Section" and "be it ever so humble . . . there's no place like home-kitchen." It might be noted that the novel contains concerns about food and persistent scenes of eating seldom found in Asimov fiction. Baley, for instance, is constantly worried about missing meals, and he is constantly eating, once in company with Daneel, with the flavor and texture of the food specified in significant detail. All this, of course, reinforces the obsessional qualities of subsistence living.

Civism, the philosophy that supports the way of life created by the Cities, combines two elements: a basic level of security ("the mere fact of living in a modern city insured the bare possibility of existence, even for those entirely declassified"), and a life enclosed, crowded, and conducted at levels of existence made bearable only by evolved attitudes of Earthmen, the folkways developed to cope with the problems, and certain small privileges that accompany increasing classification. Enderby, for instance, earns the right to a window in his office (this detail also emphasizes his "Medievalism"). Baley has earned the activation of his washbowl and the privilege of eating in his home. Although "it was considered the height of ill form to parade 'status,' the loss of such small privileges would make life unbearable." Modern civism had minimized the competitive struggle for existence that had been the rule during the "fiscalism" of "Medieval" times, but it had not completely eliminated the struggle for status.

All of this is perceived—and to good effect—through the filter of Baley's consciousness. Asimov shows us his world—or as much of it as his art tells him to show us—not in the first person but in the third, through the use of Baley as a viewpoint character. The reader is with Baley constantly through the novel: Baley's goals, to solve the mystery and to get rid of the threat of the Spacers, are the reader's goals. His perceptions are all the reader gets, and his thoughts (with such exceptions as are acceptable in third-person narration) are shared with the reader. It is Baley who perceives the Cities as good, and it is his changing attitude toward Daneel (and robots in general), toward the Spacers, and toward the Cities that the novel really is about.

The Caves of Steel is that rarity in science fiction, a novel of character. Character is not supposed to concern science fiction authors very much, and Asimov, as a writer who specializes more than

most in ideas and rationality, might be expected to care even less. Elijah ("Lije") Baley, however, is the key factor in the novel, not merely because he is the detective who must solve the mystery, but because of what he is in addition to being a detective.

Unlike other Asimov characters, Baley has a past: his father had been a nuclear physicist with a rating in the top percentile who was declassified because of an accident in the nuclear plant where he worked; Baley's mother died early, and his father—Baley remembers him as sodden, morose, lost, speaking sometimes of the past in hoarse, broken sentences—died when Baley was eight; and Baley and his two older sisters went into the Section orphanage. Baley knows the horror of declassification, and that knowledge motivates his desperation to solve the mystery rather than go through what his father had suffered. Unlike other Asimov characters, who are individuals isolated by job or temperament, Baley has a family: a wife, Jessie, who had enjoyed a small, wicked pride in the name of Jezebel until Baley told her that Jezebel was not a painted hussy; and a son, Bentley ("Ben"). Baley also has experiences that keep flooding into his mind: the childhood games of running the strips and hide-and-seek with guide rods (whose gradual warming guides visitors toward their destinations); an uncle who worked in Yeast-town (once Newark, New Brunswick, and Trenton), who had illegal yeast treats for him as a child.

The changes that the reader perceives in Baley mirror the changes in the basic theme of urging Earthmen into a relationship with robots (C/Fe, pronounced "see fee") that would make possible the colonization of uninhabited worlds. Baley begins vigorously opposed to robots (but not so opposed that his intense feelings of duty and loyalty cannot persuade him to work with a robot). He is a gloomy, sardonic man and a thoughtful man whose fascination with history (like Asimov's) leads him into a variety of historical comparisons and reflections. But his first impulses, to prove that there has been no murder or that if there has it was committed by a Spacer or by Daneel himself, push him into blind alleys and near disaster. He is not, as he himself reflects, the cool, intellectual detective of fiction; his disturbance at bringing Daneel home makes him forget the murder for awhile.

Gradually he begins to change: he listens to Dr. Fastolfe's idealistic plea for the future of humanity; he first rejects the notion of Earthmen going to other worlds and then begins to consider it; he notices the smells of the City for perhaps the first time; he grows used to the presence of Daneel and wonders whether it would be

possible to work beside robots to colonize another world; he finds himself echoing Fastolfe's arguments to a Medievalist leader; and he begins to confide in Daneel and even to think well of him. "Whatever the creature was," he thinks, "he was strong and faithful, animated by no selfishness. What more could you ask of any friend? Baley needed a friend and he was in no mood to cavil at the fact that a gear replaced a blood vessel in this particular one."

Finally, at the end, Baley's conversion to Fastolfe's goals is more important than the discovery of the murderer; Enderby is persuaded, on the promise that his crime will not be revealed, to throw his efforts and the strength of the Medievalists behind the attempt to move Earthmen toward extra-terrestrial colonization. At the end Baley says, "I didn't think I would ever say anything like this to anyone like you, Daneel, but I trust you. I even—admire you." And although he considers himself too old to leave Earth (*The Naked Sun* refutes that assumption), he hopes that Daneel might help Bentley to do so some day. At the end, suddenly smiling, Baley takes R. Daneel's elbow, and they walk out the door, arm in arm.

That final image, more than anything else, speaks to Asimov's own perception of the novel's heart. And, as if to reinforce image with motivation, Daneel has already revealed that the whole Spacer concern had been its effort to persuade at least a segment of Earth's population that Sarton's and Fastolfe's goals were their own; Daneel's work with Baley had been an experiment not in whether robots could solve crimes but in whether Earthmen could be persuaded to accept them, and to accept the goal of extra-terrestrial emigration. The Spacers conclude that their only hope is the romantic, and the romantics are all Medievalists, actual or potential.

Other characters are drawn with greater care than customary in science fiction novels: Enderby, first as the harried Commissioner with his Medievalist affections and then reinterpreted as a Medievalist leader who has been trapped by accident into the role of murderer; Jessie, whose loss of name pushes her into a harmless but misleading flirtation with the Medievalists; and Daneel himself, the polite, deferential, and literal-minded robot detective, with the built-in sense of justice, who provides the ideal foil for Baley's emotionalism and is, no doubt, the author's reason for it.

Daneel allows Asimov to re-explore the problems of robots that he had covered so thoroughly in *I, Robot*: the First Law, for instance, which eliminates robots as suspects, and the literal aspect of robot minds, such as Asimov dealt with a couple of years later in "Risk." Baley is suspicious of Daneel's statement that a final adjustment

of his circuits impressed into his motivation banks a particularly strong drive—a desire for justice. Justice, Baley says, is an abstraction; only a human being can understand it. But Daneel defines justice in pragmatic terms: as the condition that exists when all the laws are enforced.

Asimov reverses the situation of "Evidence" when Baley accuses Daneel of being human, but it is not so difficult for a robot to prove that he is not. Like Byerley, however, Daneel can eat; he reveals a food sac from which he must later remove the food. Daneel is asked not to forget something, and he comments that robots are not capable of forgetting. Daneel's humanoid appearance and demeanor make even more effective the scene in which the Medievalist Clousarr slaps him and Daneel responds, "That was a dangerous action, Francis. Had I not moved backward you might easily have damaged your hand. As it is, I regret that I must have caused you pain."

Baley refers to Daneel's "queer mixture of ability and submissiveness" at one point, and at another he thinks bitterly about the ambiguities of the First Law: "A robot must not hurt a human being, unless he can think of a way to prove it is for the human being's ultimate good after all." Asimov also has the opportunity to cast a backward glance at Campbell's 1934 story, "Twilight": "He had known well enough . . . the qualities that marked off a man from a machine. Curiosity *had* to be one of them. A six-week-old kitten was curious, but how could there be a curious machine, be it ever so humanoid?"

Asimov also rationalizes the humanoid shape for robots, as he does not in *I, Robot*. Dr. Gerrigel points out that "the human form is the most successful generalized form in all nature." Rather than buying "a tractor with a positronic brain, a reaper, a harrow, a milker, an automobile, and so on," you can buy "ordinary unbrained machinery with a single positronic robot to run them all" at "a fiftieth or a hundredth the expense."

Asimov supports his vision of the future with a sprinkling of technical details other than those that describe robots or the Cities or the expressways. His Cities are powered by atomic energy (he uses the older term, "atomic pile") and were made possible by force shields, which lessened the threat of atomic war. Asimov foresaw the problem of the disposal of radioactive wastes and had the "so-called 'hot ash' . . . forced by air pressure through leaden pipes to distant caverns ten miles out in the ocean and a half mile below the ocean floor." But "Baley sometimes wondered what would happen when the caverns were filled." The force shield also is present in

the form of a force barrier that separates Spacetown from New York City.

There are other details: subetheric hand disruptors, somno vapor and retch gas (prophetic!) that help police control crowds; blasters (presumably different from subetheric hand disruptors); keratofiber (made out of some kind of horn?); one-way glass transparency at the flick of a switch; trimension that projects images in three dimensions; focused duo-beam for spying; hyposlivers of medication that dissolve into the body; shielded subether communications; no-stick fluorocarbon coatings on cookware; motospirals (a kind of escalator); natural solariums at the top of buildings so that the rich can enjoy the sun when they wish; spray-on cosmetics; wire film (a kind of video-tape); and a microfilm projector for projection in three dimensions with a film record in the form of a fixed atomic pattern in an aluminum block; and an alpha-sprayer. These are not predictions in the way that Hugo Gernsback's *Ralph 124C41* + was largely a compilation of predictions. They function to reinforce the narrative.

The expressways, for instance, not only provide the flavor of a distant and more efficient future and serve as the means to deal with mass transportation, they also are used later in the story for the escape of Baley and Daneel from the Medievalists. The guide sticks, which guide Baley and Daneel to the laboratory of Clousarr, the Medievalist "zymologist" (yeast expert), later become part of the explanation for the "murder" of R. Sammy, when Baley speculates that Enderby mis-set the guide stick for Dr. Gerrigel so that the robotocist would discover Sammy's dead body. Similarly, the escape from the Medievalists that took Baley and Daneel to the atomic power plant provided the opportunity to reveal that gamma radiation can destroy the delicate balance of Daneel's positronic brain; it also gave Enderby the idea not only of stealing the alpha-sprayer that he orders R. Sammy to clap to his head, but of framing Baley for the crime.

Some of these details are less persuasive than others, to be sure. The important aspect is the way they are worked into the fabric of the novel. They become part of the perfected Asimov style, in the way in which mainstream critics seldom use the term, or have to. A science fiction writer, however, must create a convincing milieu for events that have not happened that we know of, or have not happened yet.

Asimov developed his style gradually. Campbell helped him, no doubt, suggesting the value of reinforcing details, and Asimov recounts how Campbell helped him write "Reason" by recommending

that he start the story as late in the plot line as possible. Asimov also learned something from his reading of other writers, such as Clifford Simak, and from his participation in several Breadloaf Writers Conferences. Walter Bradbury pointed out his tendency toward overwriting and helped pare down his adjectives and adverbs; Bradbury, for instance, rejected an early version of *The Stars, Like Dust* and sent it back "copiously red-penciled." By *The Caves of Steel*, Asimov's style had settled into simple words (except for an occasional technical term) arranged in short sentences, and those sentences arranged in short paragraphs, sometimes only a sentence or two long. Rudolph Flesch would have loved it.

Asimov's style in *The Caves of Steel*, though limited by the matter-of-fact perceptions of his viewpoint character, could rise to the level of eloquence (usually in his descriptions of the City and its ways), and to sensitive depictions of human nature, as in the following paragraph reminiscent, in its observations, of Proust:

Every time he smelled raw yeast, the alchemy of sense perception threw him more than three decades into the past. He was a ten-year-old again, visiting his Uncle Boris, who was a yeast farmer. Uncle Boris always had a little supply of yeast delectables: small cookies, chocolaty things filled with sweet liquid, hard confections in the shape of cats and dogs. Young as he was, he knew that Uncle Boris shouldn't really have had them to give away and he always ate them quietly, sitting in a corner with his back to the center of the room. He would eat them quickly for fear of being caught.

They tasted all the better for that.

There is, in addition, a sense of place in *The Caves of Steel* (and in *The Naked Sun*) that does not exist in *The Foundation Trilogy* and the Robot stories, and for good reason: *The Caves of Steel* is not only a title but a place, and a place that is important to the murder investigation and the psychology of the City's citizens and the theme of the Spacers trying to induce them to leave its protection. Everywhere Baley goes he is conscious of his surroundings: Enderby's office, the expressway, the Personals, his apartment (contrasted later on with a "grim, lower-class apartment"), Spacetown, the motorways, a kitchen, a power plant, and Yeastown. The presence of an outsider, Daneel, brings it all freshly to Baley's awareness. It is as necessary to *The Caves of Steel* as it is unnecessary in *The Foundation Trilogy*.

There are other elements to a writer's style that are peculiar to science fiction which the mainstream reader might never recognize. Samuel R. Delany says that the problem with non-science-fiction readers and critics is that they must be taught to read science fiction sentence by sentence and word by word. In science fiction, he says, the metaphorical may become literal; language has implications that must be understood before the reader is aware of what is going on, and often judgement must be suspended until further information clarifies the situation.

In some senses this is true of *The Caves of Steel*. Although Asimov's style, as always, is simple and straightforward, he allows himself the occasional telling metaphor that illuminates the environment and times of the novel. "Medieval," for instance, is that kind of metaphor: it stands for us, our times, our ways. Windows are Medieval. Spectacles are Medieval. The (King James) Bible is Medieval, and it is written in Middle English. By all this the reader is intended to understand not only the passage of three thousand years but the false perspective that lumps centuries and millennia together under categories that are too broad.

The Commissioner calls Baley "a modernist," and goes on to describe a romanticized and false version of life before the Cities:

"In Medieval times, people lived in the open. I don't mean on the farms only. I mean in the cities, too. Even in New York. When it rained, they didn't think of it as waste. They gloried in it. They lived close to nature. It's healthier, better. The troubles of modern life come from being divorced from nature. Read up on the Coal Century sometime."

And in all these references, of course, Asimov is talking, as well, about our own attitudes toward the past, as Poe was in "Mellonta Tauta."

In *The Caves of Steel*, as in well-written science fiction of all kinds, language must constantly be inspected for surprises and reinterpretation. Baley notes, for instance, that there are no expressway directions to Spacetown; he explains why almost immediately: "If you've business there, you know the way. If you don't know the way, you've no business there." In a related but somewhat different process, the novel raises one aspect of Spacer attitudes that infuriates Earthmen; they are not allowed into Spacetown except singly and then thoroughly cleansed and decontaminated as if they were dirty and diseased. Later this business is turned around and inspected

from the other side; it is not Earthmen who are different, but Spacers: like Wells's Martians, they have eliminated infectious diseases and contact with Earthmen might be fatal.

The Caves of Steel contains the kind of science fiction wit that Frederik Pohl and Cyril Kornbluth displayed to such good advantage in their collaborations, beginning with *The Space Merchants*, and Pohl continued in his own satires. Novels and short stories are "viewed," for instance—this suggests a re-evaluation of the customs and literacy of a society and linguistic development in general—a reference is made to "whole yeast bread," and Baley remembers when he took his son to the zoo and they saw cats, dogs, and the wonder of sparrows flying.

At one point Asimov describes the natural Solariums at the uppermost levels of some of the wealthiest subsections of the City:

... where a partition of quartz with a movable metal shield excludes the air but lets in the sunlight. There the wives and daughters of the City's highest administrators and executives may tan themselves. There a unique thing happens every evening.

Night falls.

And Asimov moves on from that revelation about a world in which the fall of night can be a unique event (with, no doubt, a personal reference to his most famous single story, "Nightfall," in which the fall of night is unique for another reason) to an analysis of those habits of humanity that can be changed and those that cannot:

Much of the earlier habits of Earthly society have been given up in the interests of that same economy and efficiency: space, privacy, even much of free will. They are the products of civilization, however, and not much more than ten thousand years old.

The adjustment of sleep to night, however, is as old as man: a million years. The habit is not easy to give up. Although the evening is unseen, apartment lights dim as the hours of darkness pass and the City's pulse sinks. Though no one can tell noon from midnight by any cosmic phenomenon along the enclosed avenues of the City, mankind follows the mute partitionings of the hour hand.

The expressways empty, the noise of life sinks, the moving mob among the colossal alleys melts away; New York City lies

in Earth's unnoticed shadow, and its population sleeps.

The prose in which that observation is stated, it might be noted, need not be ashamed to move anywhere in literary society.

Ultimately, however, the appeal of *The Caves of Steel* depends upon two major elements: the depiction of an overpopulated society living in what we would consider a claustrophobic environment; and the relationship between an Earthman and a robot. Asimov tries to get us interested in the Sarton-Fastolfe goal of pushing Earthmen into space colonization, but because this is distant and idealistic rather than immediate and practical, we remain unconvinced. And the threat of robots replacing humans bothers us almost as little as it bothered Asimov; it matters only insofar as it motivates Baley.

The environment, on the other hand, is virtually a major character in the novel. Some readers interpret *The Caves of Steel* as dystopian. Asimov refers to this in a headnote to a story reprinted in *Nightfall and Other Stories*:

I wrote a novel in 1953 which pictured a world in which everyone lived in underground cities, comfortably enclosed away from the open air.

People would say, "How could you imagine such a nightmarish situation?"

And I would answer in astonishment, "What nightmarish situation?"

The Caves of Steel was written by a claustrophiliac (and an acrophobe) for an editor who had a severe case of agoraphobia. Asimov's dislike for travel is well known: he refuses to fly, for instance. But he also enjoys being enclosed. In that same headnote he wrote:

... my idea of a pleasant time is to go up to my attic, sit at my electric typewriter . . . , and bang away, watching the words take shape like magic before my eyes. To minimize distractions, I keep the window-shades down at all times and work exclusively by artificial light.

What may not be as well known is that Horace L. Gold could not leave his apartment for many years. Both he and Asimov would have enjoyed at least some aspects of life in the caves of steel.

But even the attractions or repulsions of the caves of steel are not

at the heart of the novel. Finally the reader wants Baley to accept Daneel, and that acceptance, in the final pages, rewards the reader's expectations with the glow of resolution satisfyingly accomplished.

The Naked Sun is the reverse side of *The Caves of Steel*. Asimov wrote it out of another emotion than his love for the enclosed environment. Asimov concluded his brief essay on his claustrophilia in *Nightfall and Other Stories* with the comment that:

... sometimes twice in one week, when I feel I've put in a good day's work, I go out in the late afternoon and take a walk through the neighborhood.

But I don't know. That thing you people have up there in the sky. It's got quite a glare to it.

That glare is the sustaining metaphor behind *The Naked Sun*. Where *The Caves of Steel* has the feeling of enclosure, *The Naked Sun* has the feeling of wide-open spaces. Where *The Caves of Steel* is concerned with overpopulation, Solaria in *The Naked Sun* is almost unpopulated: it has twenty thousand humans but two hundred million robots, and estates may consist of ten thousand square miles. Where Earth is concerned with competition from robots, Solaria is overrun by them, specializes in their production, and exports them to all the other Outer Worlds. And where the endemic psychological problem of Earthmen is agoraphobia, the problem of Solarians is agoraphilia: they so love the feeling of virgin space around them that they seldom come into contact with each other in person; on Solaria a culture has developed in which "viewing" by trimension has become the custom, where some cannot tolerate contact with other human beings, and where the rest, when contact is unavoidable, clothe every part of the body except the face.

Baley is summoned to Solaria to solve another murder. A Spacer, Rikaine Delmarre, has been murdered. It is the first crime of violence on Solaria in two centuries, which is why an Earth police detective has been requested, and it is a classic "locked-room" murder mystery in a special science-fiction sense. In that, too, it complements *The Caves of Steel*. In *The Caves of Steel*, Sarton could not have been killed by an Earthman because an Earthman could not have crossed the open spaces between New York City and Space-town; a robot could have crossed the open spaces but could not have killed Sarton because of the First Law. Asimov solved that puzzle by having Enderby instruct R. Sammy to bring him the blaster

across the open spaces and later give it back to Sammy to return. It was an ironic confirmation of the necessity of "C/Fe," the collaboration between humans and robots.

In *The Naked Sun* the situation is similar: no murder weapon is found on the scene; Gladia, Delmarre's young wife, discovers the body and is overcome, and a robot who was on the scene and an apparent witness is incoherent and has to be destroyed. The situation is reversed, however, in that an outsider could have come across open country without difficulty, entered the house, and killed Delmarre, but would have experienced major psychological inhibitions in Delmarre's physical presence as well as having to face Delmarre's neurotic reactions to his presence.

At the end of the novel Baley gathers together the suspects in true formal murder mystery fashion—but in science fiction fashion they all are present by trimensic projection: Gladia; Attlebish, the acting Head of Solarian Security; Leebig, Solaria's best roboticist; Quemot, a sociologist; Klorissa Cantoro, Delmarre's assistant as a fetologist (a Solarian expert on the external development of embryos and the rearing of children to be proper, non-gregarious Solarians); and Altim Thool, a physician. And in proper formal murder mystery fashion, Baley recounts each of their motives and opportunities for the murder before he accuses Leebig. Leebig, it seems, had been friendly with Gladia by way of frequent "viewing," but more importantly Delmarre had been working with Leebig on robotics and suspected that Leebig had plans to conquer the Galaxy by means of robots. Leebig had planned to build spaceships with positronic brains; they could be instructed to attack other ships under the assumption that those ships, too, contained only robotic brains. Delmarre had been about to reveal Leebig's plans, and Leebig murdered him by creating a robot with detachable limbs. One of these limbs had been used as the murder weapon and then reattached. (Another ironic example of "C/Fe.")

The Solarians are aghast at this perversion of robot psychology (they are surrounded by robots and their safety and peace of mind are dependent upon the sanctity of the Three Laws of Robotics) and they turn on Leebig. Leebig himself crumples and admits his guilt when Baley tells him that Baley's assistant is present at Leebig's house and is going to put him under restraint. Leebig commits suicide rather than endure someone's physical presence.

On Earth, as Baley reports to Undersecretary Albert Minnim in Washington, Minnim points out that Leebig could not have killed Delmarre because he could not have endured Delmarre's physical

proximity; he would rather die, as, in fact, he did. Baley admits that Gladia actually killed her husband in a fit of anger (and during a temporary black-out of consciousness), but Leebig arranged it, knowing of her quarrels and frustrations with her husband and instructing the robot to hand her one of its detachable limbs at the moment of her full fury.

Here, as in *The Caves of Steel*, the murder is the precipitating event and the structural element holding the novel together, but it is not the chief focus of reader interest. No one either knows or likes Delmarre—at most they respect him as “a good Solarian”—or cares about his death. The only real motivation behind Baley’s desire to solve the murder is to save the only logical suspect, Gladia, from being accused of committing the act. Motivations other than discovering the murderer—everyone believes that it was Gladia—exist for almost everyone else.

Baley (who now has been promoted to C-6) has still other motivations for his presence on Solaria. He has been asked by Minnim to observe conditions on Solaria because Earth sociologists have predicted that Earth is too dangerous to the Outer Worlds for them to allow Earth to survive; the sociologists expect the Outer Worlds to virtually wipe Earth out within a century. But no Earthman has been allowed to visit the Outer Worlds; consequently Earth knows the strengths of the Spacers but not their weaknesses. Daneel, on the other hand, has been sent to Solaria—he is again Baley’s partner, though he plays a lesser part than in *The Caves of Steel*—to provide help for Baley and to give him the prestige of associating with a Spacer (he passes as human); in reality, however, Daneel is there because the Aurorans are uneasy about political and technological developments on Solaria.

One major focus of reader interest is Solarian living conditions. Where overpopulation and the social and psychological adaptations to cope with it were one major aspect of *The Caves of Steel*, underpopulation and the adaptations of the Solarians are the focus of *The Naked Sun*. Solaria, which was settled about three hundred years earlier by the well-to-do of a comparatively nearby (two parsecs, or 6.52 light years) planet named Nexon, is fertile, temperate, and without dangerous animals. The settlers, who had felt cramped on Nexon as its population approached two million and a limitation had been placed on the number of robots (robot birth control), resolved to limit human population on Solaria to what they considered the optimum number of 20,000 and allow the robot population to grow unrestricted.

The consequence of huge estates, cheap labor, and trimensic viewing was the absence of cities. Solarians had fewer and fewer reasons for personal contact and gradually developed a pride in never seeing anyone else directly, which eventually became a neurosis about seeing anyone. Human population is limited by assigning mates according to genetic considerations (some Solarians wear gene-coded rings); children are licensed according to population needs and gene charts, then removed as month-old fetuses and brought to term in tanks. Some fifteen to twenty are received each month at what is called "the farm" and about the same number are graduated to independence after a lengthy period of education and training. They are raised by robots with human supervision and taught, in spite of their instincts for gregariousness, to prefer isolation—to grow up, that is, into proper Solarians who can barely permit their own mates to come into personal contact.

This world allows Asimov to play with two separate notions: the social customs of the Solarians and a further elaboration of robotics. Because Solarians do not like, and sometimes cannot endure, contact with other humans, they must learn to work with robots, and they have developed an unusual skill at it. They use robots to tend to the children (Solarians can scarcely bring themselves to touch, or even to mention, "the little animals"); Dr. Delmarre had even developed the ability to instruct a robot to spank a child, an action that could ruin a robot's positronic brain. Baley learns from Jothan Leebig the difficulties of building a robot capable of disciplining children. Baley suggests that throughout history the First Law of Robotics has been misquoted; it should be: "A robot may do nothing that, *to its knowledge*, will harm a human being, nor, through inaction, *knowingly allow a human being to come to harm.*" The novel explores, as well, ways of using a robot to commit murder: instructing one robot to put poison into water and another to give it to a human; instructing a robot to hand a child a poisoned arrow; and instructing a robot to hand a woman its arm to use as a club when she is overwrought.

In another episode, Baley orders Daneel to reveal himself as a robot to the other household robots so that Daneel will not interfere with Baley's plan, which Daneel thinks is too dangerous and cannot permit. Baley wants to go about interviewing people in person.

Asimov's greatest delight, here at least, is in the social customs that have developed to reinforce the physical situation on Solaria. The language reflects the Solarians' personal-contact taboo: terms relating to personal contact (affection, love, children, even touching)

are obscene or scandalous, and films of people kissing are pornographic. Liberties may be taken while viewing; nudity is not uncommon, and the beautiful Gladia first appears to Baley like Venus fresh from her bath. Daneel, incidentally, interprets her action, perhaps correctly, as a ploy to gain Baley's sympathy, though Klorissa is equally ready to bare herself before the trimensional camera. Gladia excuses it as "only viewing." On the rare occasions when individuals meet, however, they are fully clothed down to gloves and stand far from each other.

This leads to one of the key scenes in the novel. Asimov wrote to me (this, of course, was more than a quarter-century ago when the postmaster was still declaring books obscene) that he had just written a pornographic scene that the postmaster couldn't touch. He was right. After Leebig commits suicide and just before Gladia is about to depart for Aurora where she can lead a more "normal" life and her more affectionate nature can be expressed, she asks for one last interview with Baley and arrives in person, fully clothed, of course. As they are saying goodbye, she asks if she can touch him. Slowly she removes her glove. Asimov has invested the act with such significance, it is more erotic than explicit sex.

The emotional content of the scene is heightened by the possibility of romance between Baley and Gladia. It is no more than a possibility. Baley is approaching middle age and is a man of honor, and both recognize the gulf between their cultures—but they also recognize their mutual attraction. When Baley dreams about his wife, Jessie, she looks a lot like Gladia. They have a meeting at which Gladia overcomes her Solarian neurosis to allow Baley to get closer and closer, even to sit on the same garden bench and to hand him a flower, their fingers almost touching. And at their final meeting Gladia not only removes her glove but takes his hand and then touches his cheek, and Baley feels a sense of loss as she leaves.

Finally, however, *The Naked Sun* is about Elijah Baley and his battle against agoraphobia. Where *The Caves of Steel* concerned itself mostly with Baley's acceptance of friendship with a robot, Daneel plays a smaller part in *The Naked Sun*. For some chapters, after Baley exposes him as a robot in order to get freedom to act, Daneel is out of sight entirely, and although he comes up with some speculations about the murder that Baley knocks down ("Logical but not reasonable. Wasn't that the definition of a robot?"), he does not participate in the murder's resolution, being on his way to Leebig's house (a final irony that Baley himself notes: Leebig committed suicide rather than meet one of the robots he loved).

The key image after the naked sun is "walls." The first sentence of the novel speaks of Baley's panic at the thought of leaving the protection of his New York City walls and of flying to Washington, even though the trip itself would never expose Baley to the open air—"The New York Runway Number 2 . . . was decently enclosed, with a lock opening to the unprotected atmosphere only after air speed had been achieved." The airplane has no windows and a news-strip unrolls constantly at eye level with news and short fiction to distract the travelers. Baley even tells himself:

I'm enclosed. This plane is just a little City.

But he didn't fool himself. There was an inch of steel at his left; he could feel it with his elbow. Past that, nothing—

Well, air! But that was nothing, really.

A thousand miles of it in one direction. A thousand in another. One mile of it, maybe two, straight down.

He almost wished he could see straight down, glimpse the top of the buried Cities he was passing over: New York, Philadelphia, Baltimore, Washington. He imagined the rolling, low-slung cluster complexes of domes he had never seen but knew to be there. And under them, for a mile underground and dozens of miles in every direction, would be the Cities.

The endless, living corridors of the Cities, he thought, alive with people; apartments, community kitchens, factories, Expressways; all comfortable and warm with the evidence of man.

From Washington Baley goes to a spaceship and experiences an Earth night ("Baley shivered spasmodically in the raw, open air"), but it is not so bad because "the night closed in . . . like dark black walls melting into a black ceiling overhead." Then he must travel by Spacer vessel, by Jump through hyperspace, to Solaria. That is not so bad either, because the spaceship is all enclosed, and even larger than an airplane, like a small City. The first crisis comes when the spaceship is scheduled to land on Solaria, and Baley is told it will land in daylight and "he would have to step out onto the unprotected surface of a planet in daytime." He is fighting panic again as the first chapter ends.

Baley tries to tell himself that being in the open is natural; men had done it all their lives, and the Spacers did it now. "There is no real harm in wall-lessness." But reason alone is not enough. "Something above and beyond reason cried out for walls and would have none of space." Daneel, however, anticipates Baley's neurosis and

arranges for an air-tube, commonly used in space between vessels, to be connected to a ground-transport vehicle. Daneel speaks of Baley's "peculiarities," a term Baley doesn't like. He resents Daneel's concern about his neurosis and feels "a sudden need to see," motivated partly by Daneel's over-solicitude and partly by Minnim's instructions to observe. But Daneel will not retract the top of the vehicle for fear of the harm that Baley might suffer, and Baley has to trick the robot driver into opening the top and exposing him to Solaria's naked sun: "Blue, green, air, noise, motion—and over it all, beating down, furiously, relentlessly, frighteningly, was the white light that came from a ball in the sky." Daneel has to pull Baley down to keep him from injuring his eyes by staring too long at the sun, and Baley loses consciousness.

Asimov makes Baley's neurosis convincingly crippling but also presents Baley as a man with a stubborn need to face his fear and conquer it.

What he really wanted was an inner knowledge that he could take care of himself and fulfill his assignment. The sight and fear of the open had been hard to take. It might be that when the time came he would lack the hardihood to dare face it again, at the cost of his self-respect and, conceivably, of Earth's safety. All over a small matter of emptiness.

His face grew grim even at the glancing touch of that thought. He would face air, sun, and empty space yet!

When he tries to sleep, however, he pictures the house that has been built for him and Daneel (and will be torn down when he leaves, because only one house is allowed per estate and labor is cheap) "balanced precariously at the outer skin of the world, with emptiness waiting just outside like a monster." And he thinks of Jessie, a thousand light-years away, and he wishes there were a tunnel from Solaria to Earth so that he could walk back to Earth, back to Jessie, back to comfort and security. . . .

Baley and the reader are continually reminded of Baley's insecurity and his determination to resist it. He reflects that the topmost levels in New York are low-rent (this seems inconsistent with his description in *The Caves of Steel* of the Solariums of the wealthy). His dream of Jessie includes a sun shining down on them through the caves of steel. Daneel continues his efforts to protect Baley from his own weaknesses, trying to persuade him on several occasions to stay within the house prepared for them and do his interviewing

by trimensional projection.

Baley finds himself in an air-borne vessel for the second time, on his way to see the sociologist Anselmo Quemot, but this vessel has windows and the windows are transparent. Baley fights his distress, which Asimov reveals through understatement: "He buried his head in his knees only when he could absolutely no longer help it." But, a bit earlier, "He had begun by stepping across open ground to the waiting plane with a kind of lightheaded dizziness that was almost enjoyable, and he had ordered the windows left unblanked in a kind of manic self-confidence." Baley's will begins to master his fears. In the interview with Quemot, opposing fears are neatly balanced as Baley's initial concern about blanking out the windows is matched by Quemot's growing neurosis about Baley's physical presence.

ence.

In the next scene, Baley goes to see Delmarre's assistant, Klorissa Cantoro. He scarcely minds the plane trip this time, but he expresses a desire to get indoors quickly—again this is contrasted with Klorissa's concern that he come no closer to her than some twenty-five feet. But Baley asks to go outside again ("I'm trying to grow accustomed to the outdoors") in order to observe the children at play. He has a physical reaction to the outdoors—his body feels chilled, his teeth chatter, his eyes hurt at looking "so far at a horizon so hazy green and blue"—"and yet he could fight off the urge to run, to return to enclosure." He marvels at "a living tree!" A bit later he walks under a group of three trees and finds it "almost like being surrounded by imperfect walls. The sun was only a wavering series of glitters through the leaves, so disconnected as almost to be robbed of horror." But when Klorissa calls to him to "watch out!" his taut emotions "snapped wide and he flamed into panic. All the terror of the open air and the endless vaults of heaven broke in upon him."

On his way to an interview with Gladia "for the first time Baley found himself not minding a plane flight through open space. . . . It was almost as though he were in his own element. . . . How fast could a man adapt to nightmare? Or was it Gladia? He would be seeing her soon, not viewing her. Was that what gave him confidence and this odd feeling of mixed apprehension and anticipation?"

During the interview the image of walls reappears in a light-form portrait Gladia does of him. She encloses it all in "a flat, lusterless hollow cube of slate gray . . ." and "the light within shone through it, but dimmer; imprisoned, somehow." She identifies it as "the wall about you, the way you can't go outside, the way you have to be inside. You are inside there. Don't you see?" Baley's disapproval of

that image of himself leads him to agree to walk with her outside, along with his hope that if he goes in spite of his impulse to refuse she will agree "to take away the gray." But as they leave, the structure of light "stayed behind, holding Baley's imprisoned soul fast in the gray of the Cities."

The walk is the ultimate trial not only for Gladia, who enjoys "seeing" and proximity to a man in spite of her upbringing, but for Baley. He finds space drawing him but wants "Earth and the warmth and companionship of the man-crammed Cities." But he no longer can summon up the image of New York to sustain him. The time is late afternoon and Baley faces the facts of the movement of the sun. Finally he finds himself staring directly at the sun as it rests nearly at the horizon and has a vision:

The sun was moving down to the horizon because the planet's surface was moving away from it, a thousand miles an hour, spinning under that naked sun, spinning with nothing to guard the microbes called men that scurried over its spinning surface, spinning madly forever, spinning—spinning . . .

The experience overcomes him; he faints again, from what Daneel later calls the cumulative effects of being exposed to the open.

Baley's successful fight against his neurosis comes to a resolution when, still weak from his experience, he walks to the window and starts to lift the curtain. Daneel takes it out of his fingers. "In the split fraction of a moment in which Baley watched the robot's hand take the curtain away from him with the loving caution of a mother protecting her child from the fire, a revolution took place within him." Just as Delmarre's nursery robots cannot match long-term good against the short-term discipline of their charges, so Daneel cannot understand Baley's need to face his terror:

He snatched the curtain back, yanking it out of Daneel's grasp. Throwing his full weight against it, he tore it away from the window, leaving shreds behind.

"Partner Elijah!" said Daneel softly. "Surely you know now what the open will do to you."

"I know," said Baley, "what it will do *for* me." . . .

And for the first time he faced it freely. It was no longer bravado, or perverse curiosity, or the pathway to a solution of a murder. He faced it because he knew he wanted to and because he needed to. That made all the difference.

Walls were crutches! Darkness and crowds were crutches! He must have thought so, unconsciously, and hated them even when he most thought he loved and needed them. . . .

He felt himself filling with a sense of victory, and as though victory were contagious, a new thought came, bursting like an inner shout. . . .

That thought is the solution to the murder. One good thing leads to another. Asimov has shown Baley passing through successive stages of his agoraphobia and the consequences of his attempts to conquer it, growing more able to control his fear with each incident, until at last he masters his deepest apprehensions and becomes a better person at the same time that he solves the murder that brought him to Solaria.

The only action remaining to the novel is Baley's return to Earth, bringing the movement of the novel full circle. Asimov shows this to the reader as well. The theme of *The Caves of Steel* was the need for Earthmen to emigrate to the unsettled planets, not so much as a means of relieving population pressure (an impractical notion) but to resume humanity's march to the stars so that it can accept its heritage: the uninhabited galaxy. The theme did not seem to be taken particularly seriously in the first novel, since the possibility of Earthmen going to other planets without their enclosed environment seemed so unlikely as to be virtually impossible: at best it might be left to their children or their children's children. But in *The Naked Sun* Baley faced his fears for all Earthmen; what he can do, others can do, and Baley thinks of his son Bentley "standing on some empty world, building a spacious life. It was a frightening thought. Baley still feared the open. [Asimov is a realist about human psychology—and perhaps about his own—and he does not believe that he can work a miracle and change Baley completely.] But he no longer feared the fear! It was not something to run from, that fear, but something to fight."

Baley goes through a few paragraphs of reverie retracing his experiences with the open spaces and the naked sun on Solaria, and realizes not only that others can do it but that it has changed him. He no longer fits in. "He had told Minnim that Cities were wombs, and so they were. And what was the first thing a man must do before he can be a man? He must be born. He must leave the womb. And once left, it could not be re-entered." For Baley the caves of steel now are alien.

The novel ends as it began, with Baley facing his fear. But now

he can handle it. He also has been changed by his experience and he understands his dream on Solaria. The last words of the novel are:

He lifted his head and he could see through all the steel and concrete and humanity above him. He could see the beacon set in space to lure men outward. He could see it shining down. The naked sun!

The Naked Sun was the last science-fiction novel (aside from a couple of his juvenile novels and his novelization of the film *Fantastic Voyage*) Asimov would write until *The Gods Themselves* fifteen years later, and it raises a question: why not a third robot novel to make the series a trilogy? After all, the trilogy is the natural frequency of a science fiction series if the series does not continue interminably. In the second decade of the century there were the George Allan England *Darkness and Dawn* trilogy, the Charles B. Stilson *Polaris* trilogy, and J. U. Giesy's "Dog Star" trilogy; more recently have come *The Lord of the Rings* trilogy, the *Dune* trilogy, and so many fantasy trilogies that one loses track. And, of course, *The Foundation Trilogy*.

Asimov answers the question himself in *The Rest of the Robots*, which in the Doubleday edition included the robot novels:

While I was writing *The Naked Sun*, it became perfectly clear to me that what I was working on was the second novel of a trilogy.

In *The Caves of Steel* I had a society heavily overweighted in favor of humanity, with the robots unwelcome intruders. In *The Naked Sun*, on the other hand, I had an almost pure robot society with only a thin leaven of humanity barely holding it together.

What I needed to do next was to form the perfect topper to my vision of the future by setting the third novel of the trilogy in Aurora, and depicting the complete fusion of man and robot into a society that was more than both and better than either.

In the summer of 1958 I even started the novel, and then, somewhere in the fourth chapter, between one page and the next, something happened.

What had happened was Sputnik, and by the summer of 1958 Asimov had decided that "the American public deserved understand-

ing of science and that it was the burning duty of writing scientists to try to give them that understanding." And so he turned to his subsequent science popularizations that brought him fame and fortune and the majority of his two-hundred-plus books.

The explanation is neat and no doubt true as far as it goes. But there were other aspects to the decision. Asimov may have gone as far in science fiction as his talent would carry him. He mentions this in his autobiography:

As to my other career, science fiction, there, too, I had gone as far as I could. I might do things that were better than "Nightfall"; *The Foundation Trilogy*; *I, Robot*; or *The Caves of Steel*, but surely not much better. These were already recognized as classics, and I had been writing for fifteen years and I had yet to make more than ten or eleven thousand dollars a year as a writer.

Moreover, I would venture the guess that the third novel in the prospective trilogy was not going well. I cannot imagine Asimov abandoning what he considered to be his best writing in the midst of what he considered his best novels—and never returning. The third factor in his decision may have been the fact that the first two novels lead to a third only if one considers them to be about C/Fe—the blend of humanity and robots into a better-working culture. Even on these terms, a novel placed on Aurora would have been the most difficult of dramatic forms to bring off successfully, and out of keeping with the forms of the two earlier novels, a Utopia. And C/Fe is only a small part of what *The Caves of Steel* and *The Naked Sun* are about. More engrossing and more vital, it seems to me, are Earth and Solaria as cultural mirror-images; in this sense a third novel would seem at best only a middle-ground and at worst unnecessary.

Finally, if one reads the novels as I have tried to argue they should be read, as Baley's education—an example of the plot that Heinlein has called "the man-who-learned-better"—then that education has been completed. Anything more is simply elaboration. Unlike *The Foundation Trilogy*, which seems to cry out for a fourth novel, *The Robot Novels* are complete with two. I would be surprised if there ever were another.

ANSWER TO THE BAGEL HEADS HOME (from page 58)



The illustration, obviously not drawn to scale, shows the earth and moon, and the line along which the *Bagel* is traveling. The spot on this line where the disks of the earth and moon appear identical is clearly *K*, the intersection of the two internal tangents.

Right triangles *MAK* and *EBK* are similar (having two angles in common), therefore their corresponding sides are in the same ratio. This permits the simple linear equation:

$$x / (240,000 - x) = 1,000 / 4,000 = 1/4,$$

which gives *x* a value of 48,000 miles. At a distance of 48,000 miles from the moon's center, the Earth and moon will appear identical in size.

Colonel Couth looked over Tanya's diagram and nodded approval. "Excellent. Now you can use the same drawing to work on a tougher problem. How would you go about constructing an orbit for the *Bagel*, around the moon, such that *anywhere along that orbit* the moon and Earth will always look the same size?"

It took longer, but Tanya solved this also. For her answer, see page 108.

1932 MONON FREIGHTYARD BLUES

By John M. Ford

art: Frank North



*Mr. Ford's first novel,
Web of Angels, was released from
Pocket Books in July 1980.*

*Down by the Central Railroad, Jawn Henry lies buried in the sand.
And every day when the trains roll by, they say There lies a steel-
drivin' man, oh Lordy—*

It was four on a cool July morning in the Greencastle yards east of Indianapolis. Everything was black and blue in the dawnlight; black iron on gravel that seemed to glow steel-blue, blue-white glints from railheads on spaced black holes of ties. There were sharp smells of tar and coal smoke, and the sweetish odor of rusty metal. Flanged wheels ground and loco whistles sounded from afar off.

There was a red flare, and Billy Palmer melted into a boxcar's shadow; but it was only the firebox of a switcher getting warmed up for the day. The fireman would never hear Billy pass; five years in the yards and the 'bo jungles made him safe at home here.

Billy held his old German bayonet with the point dipped, edge up, index finger hooked round the guard; gripped it to kill with, not play tough-guy. After this, he'd take Moe's black-steel combat knife and leave the bayonet—that wasn't stealing, it was only right to keep that good blade. Besides, when Moe's soul got to Valhalla they'd give him a sword the Dwarves had forged. A GM&O boxcar for his longship, the Kraut bayonet for his sword, and the yard dog at his feet; Billy hoped it'd do.

Funny how, for all his mama's preaching, Moe was the first person he'd ever thought of as having a soul.

Now he had to kill the dog.

The switch engine's stack shot sparks, and Billy thought again of the Dwarves at their forges. He ran over the picture in his mind, trying to fix it forever, the man and the hammer and the busted sword; trying, too, to call back echoes of Moe's deep voice.

"When Jawn Henry was a little baby, sittin' on his daddy's knee—"

And there stood Moe in his mind, a brown mountain with a rainbow over his shoulder, making the cold steel ring. Billy squeezed the knife tight. It wasn't the picture he wanted. He had to freeze all of Moe's stories in his head, "Just So"—because Moe was already lost—and once Billy set fire to the boxcar, Moe would be lost and gone forever. Oh my darlin', Clementine.

Where was that damn dog?

He knew the mutt; it had a foul temper even as yard dogs went,

and a lopsided, snag-toothed face that would scare off dogs twice its size. Chomper wasn't really so tough, though, just dumb. Years back he'd bit a 'bo named Tony; but Peg Tony had a sheet-metal leg from a VA hospital in Memphis, and Chomper broke his dumb jaw on it.

Billy saw the dog asleep by a car, just like he'd figured to find him. He stepped round, his basketball sneakers quiet on the ties. His head kept twisting, watching for rolling stock or Leo, the yard cop.

He got behind the dog and moved in, freezing every time it flopped a mangy white ear. It wore a little leather collar—nothing much, but Billy thought how he'd have to push it aside when the knife went in. He didn't want it to howl and bring Leo, and even less did he want to kill it sloppy and have to carry a hacked-up body across the yard. One jab in the throat. Clean and easy. Damn dog was going to die better than Moe had.

Billy bent his arms—one to hold, one to stab—and moved.

Twenty steps behind him a car side clanged with the slap of a hand and Leo's voice yelled "What the hell you *doin'*, boy?"

Chomper stirred at his feet, but Billy heard something else: the hammer coming back on Leo's revolver.

Shee-it, he thought, he was caught good. If he turned around and showed the shiv in his hand Leo might not just shoot him, but he'd sure as hell want an explanation. *"Okay, Mista' Cop, I was gonna kill your dog and burn a house car."* *"Why's that, boy?"* *"So's my buddy could get to heaven."* *"Your buddy a 'bo too?"* *"You bet."* *"Well, you go ahead, boy. I'll find you a match."*

Or Billy could run. Leo still might not shoot—he was tough but not mean, Billy knew, just the other way round from Chomper.

But Chomper was straight in his path, and awake enough now to bite. And Billy's legs weren't steel.

Then Billy had a thought—what Moe called an In-Sight. Billy's legs weren't steel, no; but Chomper might not know that. Once bit, twice shy. Billy almost laughed, and took a step toward the dog.

His leg wouldn't move.

Neither would the other leg. Nor his arms, nor head. Billy was stiff as a stone statue, like the men who saw one of Moe's ladies with snakes for hair.

Maybe, he thought, he was dead with Leo's bullet in his heart. More 'boes than Moe told the story about never hearing the one that killed you.

But if he was dead then so was Chomper, because the mutt was froze stiff too, one ear half up, half down, one paw stuck in the

middle of a scratch.

"Please tell me," said somebody—not Leo for certain—"why you wish to kill the dog?"

Oh Christ, Billy thought, he *was* dead—but that wasn't the bad part: he was dead and his mama was right, there was a judgement coming after with the Man on a white throne.

Moe told stories about it being that way, too; and one of them came to Billy, just as clear as if Moe were right here—or was Moe here?

"Okay, Mister God," Billy said, "my name's Devil-May-Care; and you just throw me down in that Hell of yours, and I'll cheat the Devil at cards and get myself out. And I'll win every soul down there to boot—startin' with Moe's."

The voice didn't answer. There were clicking noises, like wheels on rail joints, and then the voice said "Whatever have we happened upon? Krodi, let him go . . . but make him drop the knife."

Billy's hand and wrist tingled. His fingers opened up—it didn't hurt, and he couldn't fight it at all, they just opened like he was doing it himself, only he wasn't—and the bayonet hit a tie point-first and stuck there not an inch from Chomper's ear. And the dog didn't twitch.

Then Billy could move again, all over, all by himself. He thought about making a grab for the knife, but he wasn't dumb enough to think about it much. He turned around, real slow.

There was a tall man standing there. He was sunburnt, with wild hair and a bushy beard of a way-out Irish red. There was a shiny metal gadget in his big hands. He wore a dark suit, white shirt and dark tie, shiny black shoes, not July clothes by a long way—like an FBI man's in the movies. Billy wondered if he was a G-Man, threw away the idea as silly, then wondered it again. Billy knew about atomic bombs—Moe'd taught him to first read the papers before stuffing his coat with them and sleeping on them—and Moe had told about death rays.

A few feet behind the man stood Leo, his mouth open, pointing the .38 Smith and Wesson he called Little Pete straight at where Billy had stood.

The big man turned to look at Leo. He smiled and waggled his hand in front of Leo's face. Leo didn't blink any more than Chomper had.

"He can't see or hear anything just now," the man said. "Nor can the dog." He looked close at Little Pete. "Oh, but we cut it fine. The hammer's descending upon the firing pin. That is how these work."

JOHN M. FORD

isn't it? Yes, I thought so."

Billy walked closer, keeping his hands in view. Between two cars he saw the fireman stoking the switcher. The man held still, a hand stiff in the air. The smoke from the stack held still, like dirty cotton. The flames in the firebox held still, like broken red glass.

"A time machine," Billy said.

The red-haired man looked up sharp. Billy didn't flinch. "You know . . . Krodi, check, please, did we err . . . ? Oh, I see. You've read the fiction."

"Man told me." A time machine—a *time machine*! Billy'd always had a hard time telling Moe's fake-stories from the true ones—and now and then they'd read one of his tallest tales in the papers, or a mechanics magazine. But for a time machine to turn up real opened up whole worlds. Spaceships, rayguns, the Lens of Civilization . . .

And Moe alive again, talking, singing.

"Can you go back in time with that?" If the way back to Moe was in that shiny box, then Billy'd get it. No matter what kind of heat the red-haired man was packing. Certainly not if all Billy had to do was kill him for it.

"What, this?" said the man. "Oh, the fantasy, of course. No. No, this is not for travel. Out of my field, but I doubt we'll ever learn that trick. This merely . . . accelerates . . . speeds us up, relatively speaking. Do you see?" He waved an arm at stopped-cold people, smoke, fire. Billy noticed a silence over everything; no engines or wheels, no whistles or steam. The man's voice was strong . . . like Moe's . . . but it had a dead quality, no echo at all.

He said "We travel between their heartbeats. They will not even know we are here."

"I could see. And hear."

"After I incorporated you into the effect. Another device held you in place then, and, ah, disarmed you. Which brings us back to: why did you want to kill the dog?"

"Why should I tell you?" Billy took a casual step forward. He'd lost Moe again, in just the space between words; and it made him mad. And he wasn't sure he believed the man. "What's it worth to you?" There was, too, the sneaking fear that the man could read his mind. They could do that, the future people, in the stories.

"I don't suppose it's worth anything . . . though my measures of worth wouldn't mean a thing to you. I was merely curious. Killing dogs is a major break in the cultural matrix here, now, as I understood it. And I thought . . .

"Ah, well; if you don't wish to tell me, I'll set everything back as it was. This man's bullet will kill you, incidentally, once I lift the effect. Even knowing what you do you won't be able to roll clear in time."

Billy took another step. Keep cool but keep closing. "Aw, now, man, you don't wanna do that, do you?" Billy's eye flicked to the man's knee, to the box dangling near it. There was a fishplate on the ground, within easy reach to finish the job.

Another two steps, and—

"Krodi!"

All of Billy's muscles stopped working. It still didn't hurt. It didn't even hurt when he toppled to the gravel, stiff as a board. Then he got up and walked—real smooth, considering that it was just his body walking, not him—back to where he had stood; over Chomper, in front of Leo, in Little Pete's sights.

"Don't, man," Billy tried to say, found he could.

The man walked around, stepped over the dog where it lay, and faced Billy. He was twiddling a piece of metal, like a silver dollar, flipping it in the air just like George Raft.

"What's it worth to you?" he said.

Hastily, the words tripping over each other, Billy told the man about Viking funerals; burning ships, dogs and swords, the Norsemen and the Geste brothers.

"I know who the Vikings were," the man said, "but those others—ah, they're new. That image, of the fort manned by dead men . . . there's one to last in the third eye." He looked at his silver disk. Billy couldn't move enough to sweat.

"I'm a singer, young man," the man finally said, "or balladeer, poet, epicist, whatever idiom you're tuned to. There seemed to be the makings of a song going on here—and so I interfered in a way I was sure I shouldn't have. Now I'm not so sure.

"Yet if I do absolutely nothing, now, nothing will be altered, at least in your local schema."

"You ain't gonna leave me here like this!"

"Except that I should do exactly that. I'm only here to record and retransmit—not for the improvement of individual lives.

"But I'll do this. Finish the song for me. Tell me who this soul was, that inspired your acts, and I'll arrange for the first bullet to miss you—and light your pyre in the metal itself."

"Sure. Sure."

The man flipped his coin again. "Krodi, are you synched? Fine. Then speak the speech, I pray you . . ." He eyed the dagger. "From

there, if you don't mind."

Yesterday afternoon Billy and Moe dropped off a Pennsy way-freight in Gary, with twenty dollars in 'bo money because the conductor had won a big poker pot the night before in Cleveland.

You can't wash in open water in Gary, because the runoff from the steel mills will burn the skin off your fingers. So they found a gas station whose attendant was asleep, waiting for the chime of the signal hose, and were in and out of its rest room in ten minutes. Moe came up with some blue chalk and left the hobo sign for "good place" near the door.

Moe went into a mill tavern while Billy walked round the block so as not to get caught loitering, and in ten more minutes they were on their way back to the yards, to the jungle, with a sack of sandwiches and a quart of beer, and sixteen dollars left because the saloonkeeper had been down on his luck too.

The hobo jungle was in an underpass that had been a construction road. The culvert roof kept the rain off, blocked the wind, hid the fire from view; and if you wanted to ride a train the conductor didn't want you on, you could lie on the slope and jump up to grab a ladder.

Gary jungle. Billy remembered Century Jones, who claimed to have ridden the baggage car of the Twentieth Century Limited; Charlie Indiana, who'd been a motorman on the Indiana Railroad forty years ago and said he was a full-blooded Miami Indian; Black Jack Pickerell, who told about dealing Twenty-One and playing piano in a New Orleans whorehouse with velvet on the walls.

When Moe heard that story, he'd sing "The House of the Rising Sun," and they'd all try to sing along, and Black Jack's fingers would move like there was a piano under them . . . but Billy always wondered anyway. Every 'bo had a nickname and a story, and they got to practice answering to their names and telling their stories until all the nits were out, so you never could tell.

When Moe first called Billy "Billy Palmer," he'd said it was for William Jackson Palmer, who built the Denver and Rio Grande Railroad.

But a few trains and jungles later, when Moe knew for sure Billy would listen, he told the story about Ivanhoe the knight, who hid out as a palmer till he could go back home.

Billy didn't make a sound that night, but he finally had to let the tears come quietly; crying for the sake of home, damn it, when he wouldn't have gone home smoking a cigar and driving a black Cadillac.

Moe the Storyteller had a hundred tales, and every one of them made-up, and every one of them true.

It was just getting dark when they came to the jungle culvert. "Happy trails," Moe called, knowing he could have sung out "Police!" and they'd have known his voice.

No one answered.

The jungle was empty, the fire cold. A tin coffeepot and two bourbon bottles lay broken in the dirt. All had been full.

"Make yourself scarce, Billy," Moe said. "This looks like sheriff work, or a new yard cop with blood in his eye." Billy clutched the bag of food, bent down and scuttled for the embankment.

"You just hold it," said a voice from past the culvert. "Don't you tramps move."

A heavy man in a white shirt and cycle-cop boots came around the end of a lone house car. He had on a cheap tin shield of the sort not too many men would feel proud wearing, and he had his finger on the trigger of a short-barrelled pump shotgun.

"You niggers come out here, both of ya. Gonna give ya both a nice cozy spot to sleep tonight." He waved the gun. "Come on! They ain't gonna fire me off this force for shootin' no tramps."

Billy had slept in jail before, and Moe a hundred times. But there was that shotgun, and the grin behind it, and those smashed liquor bottles. So they all held still, quiet.

Billy heard the sound and turned his head. A car was rolling in the yard—just the barest clinking and grinding. Twenty-year railroad men got killed all the time by rolling stock they never heard.

And twenty-year men don't stand between the rails, not looking up or down, not listening.

Moe had caught it too, of course, probably before Billy. He leaned, and pointed, and yelled "Look out, man!" in an already-great voice the culvert made sound like the thunder of Thor.

The yard cop's jaw wobbled and his eyes popped at the sight and sound of Moe. He was scared; a scared man with a shotgun.

The blast caught Moe in the left side. Billy saw his clothes shred and sag, saw red flashes of blood.

The cop turned toward Billy, pumping a shell into his gun. He looked up to aim—and saw the rolling car instead.

The car had thirty tons on the fat man. It just carried him away with a soft thud and a scream: a black hopper car, with the words NICKEL PLATE ROAD on the side in white, printing on Billy's sight as it passed so he thought he'd never see anything else—and at once it was just another freight car rolling by.

Billy ran to Moe, hugging the sack. The big man was trembling, something Billy had never seen him do, not with cold or hunger; but he did not fall. "Come," he said, his voice still firm but very quiet, "let's away . . ."

Billy led him to an outbound stage track, and a Monon freight, Moe walking the whole distance unaided. "Better find us a reefer car, Billy Palmer," he said; "It's going to be a warm summer night."

Billy ran down the line of cars and filled his jacket with chunks of ice fallen from the roofs of freshly iced refrigerator cars. He got back to the boxcar they'd picked to ride in, found Moe still alive, and let out a tight-held breath.

Billy wrapped Moe's shirt around the pellet wounds, using napkins from the food bag instead of gauze. He dug a plumber's candle from his pocket, lit it and set it in a puddle of wax drippings.

"Oh, Billy Palmer," said Moe, lying in sawdust and ice, "this looks to be the longest night of my life."

"Be quiet, Moe. There's a doc in Evansville, he won't take more than fifteen bucks. They're ugly holes, but they're not deep."

"No, not so deep as a well, or so wide as a church-door . . . but they'll serve . . . tomorrow, Billy Palmer, you will find me a grave man."

"Moe, hold still . . . tell me a story, Moe."

"A story more? One more, then . . . all for one, and one for all . . ."

"Yeah, Moe, the Musketeers. Tell me about the Queen's Diamonds." Billy held up a handful of ice, just like Moe had when he'd first told that story.

"There was a Queen," said Moe, "who Styrbiorn the Strong loved, when she was the last woman the Gods made he should have loved . . ."

The engineer let out the coupler slack with a snap, and Moe groaned, which was another thing Billy had never heard him do.

Moe whisper-sang, "Jay Gould's daughter said Daddy, why; don't you nail up the louvers so the bums can't ride; if the bums want to ride, let 'em ride the rod; let 'em hold to the queenposts and trust to God. And trust to God . . . and trust . . ."

"Go to sleep, Moe, it's the best thing. Just a few hours south to Evansville, and he's a good doc—"

"Sleep?" Moe rumbled, and coughed. Blood showed on his lip; he licked it away at once. "M-moe doth murder sleep. Ma-madder music, stronger wine."

Billy touched Moe's forehead, found it hot. Moe rolled his head aside, and Billy saw where a pellet had buried itself in Moe's temple,

nearly hidden under his hair. Billy's fingers barely brushed the place, and Moe gasped for what might have been the first time in his life.

"Poetry overcomes the world . . . and the seas with oysters . . ." Moe laughed. "How my tales have grown in the telling. And yet I remember a time when the only chambered Nautilus I knew was the back of a cast Griffin Denver car wheel."

He gripped Billy's hand. "I met a 'bo in General Palmer's yards, Billy Palmer, when I was young like you, when there was time."

"You said that," Billy said. He no longer wanted Moe to sleep. As long as he kept talking, even rambling or raving, he stayed alive. "The Professor, you called him."

"Yeah, the Professor, though I don't think he really was one. A hobo with his bindle full of books . . . I told him he was crazy, or something like that, and he told me I was a benighted indigent, and damned if I didn't have to read his books to find out if I'd been cussed at, or what . . .

"He's dead now, of course, dead ten years, during the war . . . lot of 'boes died during the war, Billy, because they ran the trains fast for victory.

"And I never got to ask him . . . though I always knew. . . ."

"Knew what, Moe? Ask what?"

"I always knew there had to be a reason why he bothered with me. Now I know."

"What, Moe?"

Moe raised his head, his eyes shiny black in his ice-damp, fever-dry face. He looked at Billy, then at Billy's candle. "And wilt thou say to them, 'Eh, he wor a wonderly fine candle?'"

Billy turned to look at the flame, and heard Moe's head fall back. There was no groan, but a sigh, a deep-lung, blood-bubbling sigh. And then all the stories were over.

The train rolled south. Billy had whole hours to decide what to do.

"And you decided on a Viking funeral."

"You said you knew about the Vikings."

"Oh, yes. We who wrack the mead-hall monster, then dive deep to meet its mother, we know."

Billy shook his head. "You talk like Moe used to."

"That isn't surprising. We're in the same trade, as I said. Wandering minstrel, I . . . you may call me Holb, Billy Palmer. *Krodi* . . ."

Billy was free to move again. He did not abuse the freedom. At

once the places he'd fallen on began to hurt. "Yeah, Mr. Holb. Where do you come from?"

"I'd lie, except that I can tell from your tone you've guessed already. Not your Earth."

"Another planet?"

Holb laughed. "Another star. So far away that I'll never live to see it again. On and on and on we go, we minstrels, collecting bits of the past on a thousand planets over a thousand years, shaping them into songs."

"But if you won't live long enough to go home—" that word again "—what do you do with them?"

"Leave some, as the seeds of songs to come. Ship some home, wrapped in tight little pulses of energy, those too good to let wait. But save most, in Krodi."

"The man you were talking to?" Billy had not forgotten the movement of his limbs.

"Man? No. More. Krodi is a machine, and a ship, and a more wonderful memory than ever was born alive. He feeds me your language even as we talk. He thinks a little as you or I, enough so that we give him all history as songs, the better to remember. His name, in a tongue you couldn't speak if you were taught it, means 'The Ten-thousandth Song.' And he never forgets, or ages, or dies."

Billy was a little angry again. "Then what have you got to do?"

"Why, Billy," Holb said very seriously, "someone has to write Krodi's songs."

Billy looked away.

"And you've given me one," Holb said quietly.

"We got plenty of killings."

"You're right, of course. It's always so. But I was right as well. There is a very great song here. It is, in fact, the Song of Songs. The Tale of the Bard. All worlds with singers sing it—but it is a rare and wonderful thing to find it actually happening." Holb bowed. "Billy Palmer, I owe you."

Wonderful, huh, Billy thought. He said, "Then you're not gonna put me back in front of Little Pete?"

"Little—oh, the weapon. How given to sexual metaphor you are. No, no, Billy. I owe you, as I said."

"You said you'd give me a match that'd burn a boxcar."

"I did. But . . ."

"I didn't think you would," Billy said bitterly.

"That's not what I meant, Billy. Surely I'd have given you an igniter. There would certainly be nothing left to upset your local

technological bracket—as if, after the tinkering I've done already, we were under such constraint.

"I question, rather, whether the burning is what you want. So long traveling, Billy, I think makes us excessively callous. We get lonely, and bored, and we want to watch the walls of Troy burn because there's the stuff of an epic in it.

"I was thinking, Billy, about you, and the moon . . . Billy Palmer, these yard cops and their guns—is that what you have to look forward to? Are you outlaw now, as well as outcaste?"

Billy hadn't even thought of that. "I don't know. I don't think so—that cop up in Gary, they'd see that for an accident. Leo here—well, Leo likes to wave Little Pete."

"That hammer's frozen falling, Billy."

"Okay, so what're you asking?"

"If you'll come with me."

It had been rolling round Billy's mind like a big lead shot. And now it was out. Holb was offering to be Moe . . . so it must be true, after all, that for all his tricks he couldn't bring Moe back.

"Just you and me? And Krodi?"

"There are others. A dozen of us; a dozen different forms. Not all poets are human-shaped, Billy. Do you think that would be hard for you?"

Billy laughed. "Can't be stranger than the people I've known."

"No . . . less so, I should think."

"So what would I do? Be cabin boy, or something?"

"What need have we of menials, with Krodi to attend? No, Billy. You'd be one of us. A singer, hominid form. Not the first from Earth, by any means. You'd tell every story Moe told you, first to Krodi and then to a hundred other races in our shape, on a hundred different worlds."

"But I wouldn't ever come back to . . . here, again."

"Is there anything here for you to return to?"

"Hell, no," Billy said, surprised at how soft and weak the words came out.

Holb nodded. "The thought comes quickly, the act follows slow."

"The hell it does," Billy said. "When you gotta run, you run."

Again Holb nodded. Billy started to say more, then stopped. Wasn't it true? When it had finally gotten to be too much from his mother and his sisters, school, the cops, he'd gone down to the yards and hopped the first L&N freight. . . .

And wandered home late to find nobody had missed him. And gone out another night, and another, catching those trains of the

mind. Until he finally caught one in the flesh, scraping his hands on ladder rungs, falling asleep in dirty packing—

Billy held stiller than he'd been under Krodi's thumb, remembering what rod-riding was like before he met Moe.

"I and my circle have the time for thought," Moe—*Holb!*—said. "Krodi has forever."

Yeah, time, sure, but he still had to decide, and once decided he couldn't change his mind for anything.

Moe, tell me what to do, he thought, and then thought maybe Moe had.

"Take Moe with you," Billy said.

Holb looked toward Moe's steel coffin. "He can't—oh. I believe I understand. Burial in space."

"You give Moe a good funeral, and I'll tell you every word of his stories I can remember."

"And stay here?"

"You said we had time."

"But you'd stay. Why?"

"That's the last story I'll tell you."

"Then, Billy, let's be seated comfortably."

"... but then, in the last hour before the last fight, the page boy came in to see King Arthur, and tell him how good a bowman he'd be, even better than Robin Hood. But the King knew just how much good bows and arrows were going to be against Mordred's cannon. So he made Tom the page a knight, so whatever orders the King gave he'd have to obey them, and he told Sir Tom not to fight.

"Tom didn't understand. But the King said, 'Go home, Tom; my order to you is to tell the story of King Arthur after King Arthur is gone. Tell it to everybody. Tell it when you're an old man. If you ever hear anybody say there wasn't any King Arthur, you call that man a liar to his face and tell the truth. And that's how you're going to fight for the King, Sir Tom.'

"Then King Arthur pointed at a candle and talked like the people in Tom's home town did. He said 'Wilt thou tell them, "Eh, he wor a wonderly fine candle"? And Tom swore like only real knights can, that he would."

Holb ran a finger over his beard. "We had listeners here when that story was new," he said, "but yours is a fine telling."

"But you see why?" Billy said. "He told me to. So I've got to keep on. Besides, if I went with you I couldn't do anything you aren't already doing."

"Of course," Holb said. "You do a braver thing than any of us, Billy Palmer. And do not think I will not sing of it."

Billy turned his head, stared out at the space around them, at the Earth below, which did not turn. They had shown him the ship, and he knew he would not remember any of it, except as shiny-bright details in stories he would tell.

"I wonder . . ." said one of the other storytellers, who looked like a big-eyed bass in a green silk suit, and kept drinking blue beer from a mug. "That dog you were with. How loyal are they to their human masters?"

"Dog like Chomper ain't got any master. He'll run after whoever feeds him best."

Holb grinned. "If that's so . . . Krodi! Food synthesis, special formulation. Billy, what do you suggest?"

Little Pete's hammer snapped down, and a .38 round split the morning air.

Two feet below it, Chomper yelped and Billy Palmer dropped the beef bone in his hand.

"God damn, Leo!" Billy yelled, and rolled under a car. Chomper, brave pup, ran after him.

"What—" Leo said. "Billy?" He was trying to puzzle out, all at once, how the hobo kid had ducked so fast and why the bone had been a shiv a second ago and what he was shooting for—and it was just too much mystery for him. He looked stupidly at the gun in his hand, shoved it in his belt and opened his mouth to ask questions he knew were going to be silly.

But Billy, and Chomper behind him, were running kitty-corner across the yard, jumping couplings and running through boxcars open both sides. Billy was laughing like a loony, Chomper barking in his half-mouthed way.

There ought to be a westbound freight to St. Louis somewhere here, and he'd find it; and from St. Louis a train to Denver, and he'd catch that too. And in Denver they'd surely need a yard hand who could read the rulebook and write his name, and ride the cars as well as any 'bo.

There was money in his pocket that the storytellers said would spend fine—for a Pullman ticket, maybe, and a Get a Job suit . . . and maybe a guitar. And a pen and paper for sure.

*Billy Palmer was a yardman in the morning
 at night he'd sing his songs at someone's place
 and if any man ever said that there wasn't no future
 Billy'd call him, call him a liar to his face
 cause here I stand, said Billy Palmer
 me and my old yard dog too
 and ain't we got a right to sing
 can't we sing those freightyard blues?*



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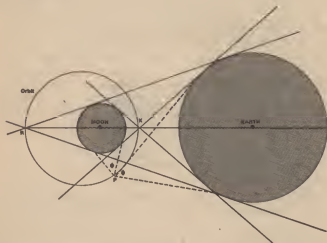
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SECOND ANSWER TO THE BAGEL HEADS HOME

(from page 91)



Draw the two external tangents as shown in the picture. They intersect at R . The Earth and moon will appear the same size at both K and R . The large circle on which points R and K lie is the orbit from which the Earth and moon will always seem the same size. In other words, from any point P on this circle, the pair of angles labeled with the Greek letter *phi* will be equal. It is called the "circle of similitude." You can find out more about its properties in textbooks on plane geometry.

Have you ever wondered about the curious fact that viewed from the Earth the sizes of the sun and moon are almost identical? That is why the disk of the moon almost exactly covers the disk of the sun during a total solar eclipse. Can you think of any good reason why this should be the case? See page 138.

AUTHOR, AUTHOR

by Tim Colley

art: Marc Schirmeister



In response to our question about bizarre adventures, Mr. Colley reports that he recently financed the world's first acrylic substitute for opal—and promptly encountered a world-wide boycott of the stuff. He plans to open an Australian Wine Club in downtown Honolulu, Hawaii, and invites readers of IA'sf to visit.

The Kindly Editor looked up and glared. "Who the hell are you—and how did you get in here?"

Winching in the Editorial blast, a nondescript little man backed hastily away from the desk—leaving a large, squishy fruit to ooze into the rejected manuscripts impaled on the Editorial spike. Only 73 of them today: He was having a good day. . . .

"Get the bejesus out. I've got a magazine to run!"

The small figure flickered, grew indistinct, then vanished with a soft pop. The leaking fruit, however, remained.

"Now that's impossible. Get me Petronius the Deducer."

Half an hour later the two men were discussing the incident. The Editor was slumped in His chair, a motorised icepack (the 'Ease-Ache Icy-Mover') humming as it massaged his migraine.

"... as though he was from another continuum, perhaps," Petronius was saying, when there was a thump, a soft snort, and a sudden stench of rotten eggs. The same little man-figure had materialized in the office, this time holding a leash attached to a large quadruped reeking of sulphuretted hydrogen. Its legs were peculiarly thick and short for its body length, the yellowish belly hair almost reaching the carpet, while its horns speared towards the ceiling.

"First the fruit, now this. Fascinating." Petronius tweaked a hair or two from the animal's back and sniffed them, then turned his attention and his scrutinising glass onto the object on the desk. "Quaint."

Grabbing the lens, the Editor could just make out a tiny label with these words almost hidden by dribbled juice: **Send to Sylph.**

"So what?"

"I would deduce our friend here has been eavesdropping. Perhaps sound in his universe is less distinct than here, or his hearing may just be poor. Perhaps he's heard you laying down the law to some aspiring author: certainly he knew that any unsolicited nondescript had to be accompanied by a stomped, Sylph-addressed canteloupe."

"How laborious." The Editor groaned and turned the ice-pack to high.

"But when you rejected his first submission, he must have thought he mis-heard you. So here he is again . . ."

"With a stumpy, sulphur-tressed antelope," completed the Kindly Editor, pounding softly on his desk.

—WE'D LIKE YOUR HELP— IN EDITING THIS MAGAZINE.

Should *IA'sfm* publish more science fact articles? Since we must hold to a 178-page format, more *fact* would mean less *fiction*; but we'll do our best to comply if the interest is there. Please indicate your opinion on the form below—or on a separate sheet of paper—and send to:

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☐ more science fact

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ON THE MARCHING MORONS

by Larry Niven & Isaac Asimov

art: George Barr



What follows is neither an editorial nor a debate, but something in between: Mr. Niven submitted his point of view, Dr. Asimov replied, and so on. We rather like the format, and we hope that we'll be able to present dual essays in later issues of the magazine.

THE MARCHING MORONS PROBLEM

by Larry Niven

Isaac Asimov is a man with a mission. For many years he has been trying to persuade humanity (or the subset of humanity that reads or hears Isaac Asimov's words) to impose birth control on itself. He is not alone in his crusade. The proponents of Zero Population Growth (ZPG) are numerous, and vocal, and eloquent.

But I distrust their solutions.

Consider ZPG activity as an evolutionary pressure. Evolution depends on those members of a species who are able to survive and breed. In most cases, evolutionary pressures act to improve a species in relation to its environment. Wolves pull down the slowest calves in a herd, and the cripples, and the elderly. (But hunters kill the best-looking stags.) When groups of humans moved north from Africa, when they had to cover their skins against the cold, those with the darkest skins died because they couldn't make enough vitamin D. The pale-skinned survived best. (But men interbreed dogs or horses to fit whimsical standards, until the breed is ruined.)

Traditionally, mankind is not good at improving a species.

For us, the arguments used by ZPG proponents select for:

- 1) People who don't listen, or don't read.
- 2) People too stupid to understand Dr. Asimov's arguments.
- 3) People who understand, but don't give a damn.
- 4) People too stupid, clumsy, hurried, eager, or careless to use contraceptives correctly. (Remember the woman who couldn't understand how she got pregnant? She took her birth control pills regularly. Except on Sundays, of course.)
- 5) Those too cowardly to face an abortion or tubal ligation or vasectomy, or those who get lost on the way to the clinic, or forget their appointments.
- 6) Those who disagree with Isaac's arguments for one reason or another. Their reasoning may follow my own arguments; or they may have read *The Marching Morons*, a classic short story by C. M. Kornbluth, whose premise went like this:

For several generations dating from now, reasoning people postpone having children, or have too few, for a variety of reasons. Children are expensive. (They used to help out with the farm work, or pick pockets for their parents/guardians.) You can't travel as much when you have children. Some apartment houses bar children. It is unkind to bring children into a world that has problems yet

unsolved. World population increases by tens of thousands daily. All good, sound motives . . .

People who don't understand any of this continue to have children at the usual rate.

In five or ten generations, the average human being is as smart as a smart dog. The remaining intelligent ones are frantically busy keeping the world going. Too busy to have children themselves . . .

The solution, as per *The Marching Morons*, was unpleasant and expensive. Never mind. Getting back to basics—

Except in case 6), the ZPG proponents are breeding their audience for stupidity or lack of altruism. Let us call that approach **Choice B** for carving ourselves a future. **Choice A** is *don't do anything*. Dr. Asimov is eager to tell you the results of *that*. War, famine, pestilence, or crowding to the point of universal madness.

Choice C is, "We have done our best to solve the problem of unwanted children. We may have to consider restricting *wanted* children."

Consider the do-it-to-him contraception, in two scenarios.

In the first, the State offers citizens a license to breed. The license or 'birthright' has to be earned . . . by extraordinary health or intelligence, by service to humanity, by paying a fee, by bribery, by the winning of a lottery . . . as on Earth in my own Known Space series, or in any of scores of other projections to be found in science fiction. The laws would have to be hellishly restrictive for this to work.

But a halfway measure might be enough. Try this: on reaching puberty, every female citizen gets a shot. It immunizes her against sperm. To get pregnant she must take another, temporary shot . . . must *do something*, with full knowledge of the consequences, rather than *forget* to do something. Notice that the women make all the decisions in this case; a would-be-father has nothing going for him save persuasion.

(This possibility is brand new information, which I learned straight from the researcher, Jack Cohen! I suggested that he could be in line for the first obscene Nobel Prize. Remember, you read it here first!)

Perhaps we would prefer to restrict populations not our own. According to General Patton, "The trick is to make some other poor bastard die for *his* country—" except that nobody actually dies when we drop contraceptive bombs into Iranian water sources. A war in which no living being gets killed or injured sounds good in principle. Trouble is, such a war could escalate. Nuclear weapons *do* exist,

and a people who have been robbed of their fertility may be less fearful of radiation.

So let's look at **Choice D**.

Make the whole world rich. Go heavy on the space effort. Orbiting solar power collectors, mines on the moon and asteroids, polluting factories moved into orbit so the Earth can become one gigantic park . . . like that. That future has been mapped out for us for decades now. (Everyone *I* know knew *exactly* where they wanted *Skylab* to hit. It was supposed to land on the man who blocked the funding that would have kept it up: Senator Proxmire.) Of course it all has to happen fairly soon—say, over a thirty-year period. Otherwise the world population will expand to absorb the new wealth.

Nations *have* become suddenly rich in the past, and the result is predictable. The population jumps, for one generation. Then it stabilizes. Sometimes it even goes down. It's dropping in France; it will drop here, after our population becomes age-heavy—a peak that is still a few decades away.

Choice D is worth a try. It's worth every effort we can put into it. Even if it doesn't work, it'll be a *lot* more fun than the Population Wars.

MY MISSION—STATED CORRECTLY

by Isaac Asimov

Now, now, Larry: in your very first paragraph you throw a curve ball. You say about me, "For many years he has been trying to persuade humanity (or the subset of humanity that reads or hears Isaac Asimov's words) to impose birth control on itself."

Inserting that parenthetical phrase, Larry, is uncommonly like a kick aimed at the groin. I have always made it quite plain that limiting the birth rate is for *everyone*, and not just for the subset of humanity that reads or hears me.

Here, for instance, is what I said in my article "Stop!" in the October 1970 issue of *F & SF*: "If the population increase must be halted, let everyone agree to and voluntarily practice the limitation of children. Everyone might simply agree to have no more than two children."

Do you notice I say "everyone"?

I mean exactly what I say. Everyone. I don't want any exceptions. I don't want special dispensations for college graduates, or for nice suburban types, or for my friends and relations. Nor do I want to

impose special restrictions on people who are different from myself and who don't share my physical appearance and culture.

And if that is done, and if the birthrate is dropped for everyone, then this whole bit about the Marching Morons does not apply. It is a red herring designed to frighten the xenophobes.

Ah (I can hear Larry say), Asimov may feel that everyone should limit the birthrate, but Asimov only speaks to and writes for the few highly intelligent and rational individuals who listen to him, read him, and understand his arguments. *They* are the ones who will have fewer children, while all the fools will breed like rabbits and the Marching Morons will overwhelm us even if Asimov doesn't intend them to.

Suppose that's so. And suppose that (in accordance with Sturgeon's Law) the human race divides into five percent intelligent and 95 percent fools. (I suspect that people who worry about the Marching Morons and who are very proud of their own superior intelligence would be willing to agree with this figure and would be likely to feel that, if anything, I am overestimating the percentage of the intelligent.)

In that case, if the 95 percent who are fools breed like rabbits, they will destroy civilization in a generation or so, not so much because they are fools but through all the ills that will beset us through an impossible overpopulation, regardless of the IQ of those making up the crowds.

What the remaining five percent will do will then be entirely irrelevant. If the five percent who are intelligent stop breeding altogether and intelligence diminishes rapidly, civilization will not be destroyed any sooner. If the five percent decide to stem the tide and to provide plenty of intelligence by having fifteen terribly bright children each, then, insofar as this will contribute still further to overpopulation, the breakdown of civilization will come even sooner.

It makes no sense therefore to worry about the ill effects of selective birth control and about the intelligent people being outbred by the fools. That is like worrying about a cold in the nose when there is an atom bomb about to explode in the vicinity.

Larry realizes this; and he doesn't suggest, for instance, that intelligent people engage in a baby-race with the fools. Instead, he talks about the various scenarios that might serve to limit population for everyone. He doesn't think that trying to limit population on purpose will help. It will have to be done *automatically*, even while people are not particularly trying to do it, and his recipe is to "make the whole world rich."

That is very nice, if it could be done; but it can't. Nations have become rich in the past, but always at the expense of other nations who became the poorer for it. The current example of the process are the oil-producing nations. They are becoming rich—but at the cost of threatened bankruptcy for almost everyone else.

We have never tried making *everyone* rich, and we don't know if we can. My own feeling is that we can't possibly unless we limit population *first*. Trying to make the whole world rich while giving the whole world carte blanche to breed will be like trying to catch a racehorse by mounting a turtle.

Mind you, I'm not against making the whole world rich. I'm as keen on it as Larry is. *But*, I think that while we're trying to make the whole world rich, we should *also* try to persuade them to lower the birthrate.

It is with that in mind that I am talking and writing about the problem and urging everyone to limit children. I intend to continue to do so day in and day out.

Fortunately, I'm not the only one who's doing this. There are many other people who are also spreading the message.

It is true that I (and others like myself) reach only a very small fraction of the world's population, but if I am reaching the intelligent, it is they who are likely to be the opinion-makers and the fashion-mongers.

One reason for high birthrates, after all, is the social pressure in *favor* of it. Think about all the people who think it is wonderful to have children and that it is a tragedy to be childless. Think about all the sermons and TV programs and greeting cards and movies and common clichés that all unite in getting across the idea of how wonderful it is to have babies and be a mother and how miserable it is to be deprived of it. Every person who participates in this pronatalist propaganda does more harm than ten times his weight in Marching Morons.

Suppose we release that social pressure and begin to praise small families. Suppose we liberate women and draw them into every phase of running the world on an equal basis with men. Suppose we convince the governments of the world that a high birthrate means *their* destruction.

In that case, the birthrate might drop because it would be fashionable to have few children and people will do anything if it is fashionable. And the birthrate will drop because women will have other things to do than have babies. And the birthrate will also drop because governments will, out of self-protection, so arrange their

tax structures as to put the power of the pocketbook behind lowered birthrates.

Is this an idle dream?

It is not! It is working!

Birthrates are dropping everywhere and small families are coming more and more into style. It is doing so not only in western Europe and in the United States and Canada, it is doing so in the Soviet Union and in China. It is doing so in much of the Third World, and I hear reports that in the last few years the birthrate has dropped substantially in Mexico, of all places.

In fact, the overall rate of world population increase has dropped, I am told, from 2 percent in 1970 (when I wrote my article "Stop!") to 1.6 percent in 1980. Not enough, goodness knows, but the change is in the right direction.

And the reason for it is that I, and others like myself, have endlessly and tirelessly drummed away at the world concerning the dangers of overpopulation, and that more and more people are beginning to understand, and that the word is spreading and the fashion is being set and that it may take hold—

And who knows, maybe we'll make it, despite Larry.

WE'VE STILL GOT A MARCHING MORONS PROBLEM

by Larry Niven

Isaac:

Kick aimed at the groin, my foot! That parenthetical insert is there for accuracy, and it says something you ought to keep in mind. You can keep saying "everyone" till Hell freezes over; but in practice, you are shouting in the ears only of English-reading people willing to listen, and understand, and act upon their understanding.

I'm not against limiting the birth rate. It's persuasion that sticks in my craw.

Put aside your characteristic humility for a moment, and remember that your readers are *brighter* than humanity's average. Persuading *them* not to have children is a mistake. Persuading anyone else is impossible. (Are you seriously counting on making it *fashionable* to have fewer children? Don't you know how fast fashions change? Next year it's the pregnant look, folks—)

You mentioned a possible answer, but you're not holding it by the handle. Our tax structure encourages children. The welfare system

ON THE MARCHING MORONS

offers *extreme* encouragement to having children; there are those for whom it is a profession! You and your allies could be using your powers of persuasion to remove that bonus. (And you are, of course. I'm suggesting that it could be the main thrust of your attack.)

But birth control by coercion isn't just unpleasant; it could conceivably get us lynched. Whichever groups take the biggest proportion of welfare checks, won't they be the ones to scream "Genocide?" And won't the lawyers and the newsmen love it? In fact, they'd be right. It's the thrust of my argument: you're committing genocide, in your fashion, against altruists who read.

If there's a better choice, we should take it.

And there is.

You say, "Nations have become rich in the past, but always at the expense of other nations who became the poorer for it." You're dead wrong, but in this case it doesn't matter. What counts is that *there are no such nations now in orbit, on the Moon, or in the asteroids.*

There's nobody to be hurt out there. The wealth is there to be grabbed: sunlight, metals, oxygen loosely bound in rocks, free fall, all raw materials for creating clean power and wealth; and one more: the space to dump endless pollution. You could vaporize the Earth without noticeably polluting interplanetary space. If we could move most of our polluting industries into orbit, we'd create considerable elbow room, not to mention drinkable river water and breathable air.

Now let's make the whole world rich. The population *might* drop, and we've given them more room . . . and if civilization fails anyway, there would be populations off Earth who might be able to start it over.

RE-REBUTTAL

by Isaac Asimov

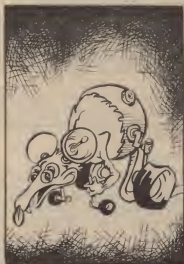
Larry, you've simply repeated what you said in the first place, in a louder voice.

I'll stand on what I said in reply.

SON OF SPACE CASES

by Sharon N. Farber

art: Marc Schirmeister



The author is studying medicine at Washington University in St. Louis, which only partially explains this . . .

The life of a doctor to the stars is fraught with constant dangers and crises. Ann Atomic, the well-known space physician, is equipped to deal with these hazards, with extensive training as a mad doctor and a psychosurgeon. She serves the public ceaselessly, both as Clinical Professor of Infernal Medicine at the Lunatech College of Physick and Chirurgery, and in her private practice in that empty region of the cosmos known as the Ann Atomic Dead Space. Here now are more illuminating cases from the files of Dr. Ann Atomic:

I. A Racy Tale

Thjalfi, mortal servant of Thor, god of thunder, was renowned for his running speed and endurance. Confidence in his abilities

prompted Thjalfi's friends to enter him in a contest against a mortal champion of the Olympian deities. The Olympians chose Achilles, fresh from a narrow victory over a tortoise in the race which has been immortalized in the epic poem *Paradox Lost*. The marathon was held that summer, near the Aegean Sea.

Dr. Ann Atomic, taking calls that day for her colleague Aesculapius, was summoned midway through the race. The Northman was unfamiliar with the Mediterranean climate and had collapsed from heat prostration. Ann had Thjalfi moved into the shade and started intravenous fluids to correct his dehydration and electrolyte imbalance.

"He'll be able to finish, won't he?" the race promoters pleaded.

"I'll advise against it," Ann replied. "And I hope this has taught you gentlemen an important lesson—never book a swift Norse in the South."

II. Foul Play

Ann Atomic's old high school friend, the enigmatic Shirley U. Gest, was starring in a new theatrical production and as usual sent Ann tickets for the opening night. The theatre was a showboat, afloat in Hades, as the producers wanted to see how well the play would be liked in the Styx.

"It's about a quartet of billionaires who attend an auction for Saturn; that's why it's titled *Four Bid On Planet*," Ann told her fiancé Osgood Ascanby.

"Sounds forbidding, but at least it's not avant garde—that really puts me on guard," he answered.

Unfortunately, the play was written entirely in heroic couplets. "Too bad we aren't on Betelgeuse 7," Osgood groaned. "They've legislated methods of dealing with miserable minstrels who insist on producing putrid poetry."

"Yes, I've heard. They let the punishment fit the rhyme," Ann whispered.

During intermission Ann was called backstage to Shirley's dressing room. Shirley was in poor shape, evincing a constellation of symptoms.

"Oh dear," Ann said, "you've really got a rare one. You seem to have contracted a plant disease, probably harbored within the very boards of the stage."

"What's this disease called?"

Ann shook her head sadly. "I'm afraid you've got a bad case of Stage Blight."

III. Vegness is Mine . . .

While on a diplomatic visit to the Solar System, the royal family of the Vegheads toured the Bronx Zoo. The Heir Apparent strayed too near the gnus' enclosure, and those curious herbivores began to gnaw upon him. The Prince was brought by ambulance to the Lunatech Hospital emergency room, and was seen by Dr. Ann Atomic. She had just finished treating a difficult case—a robot politician with rust in his heart—and was in a poor temper.

"Don't leave a scar," the Prince warned as she began to repair his lacerations.

"As ye sew . . ." Ann muttered. "Your Highness, may I continue, or would you rather suture self?"

Just then the emergency room's order was disrupted by the entrance of the Veghead King, the Royal Bodyguard, and the herd of gnus.

"Get those animals out of my emergency room!" Ann shouted.

"In a minute," the King said. "My son, you shall now see retribution for the vicious attack upon your privileged person." At his signal the members of the bodyguard drew their disintegrator pistols and fired upon the unfortunate ungulates until nothing remained but scattered ashes. Without another word, the entire party turned as one and marched out.

An orderly immediately grabbed a broom and swept up the beasts' remains. The few ashes fit handily into a folded piece of stationery, which Ann weighed thoughtfully in one hand.

"To think," she sighed, "that this paper contains all the gnus that bit the prince."

IV. Cat Cause

Ann Atomic's home on Observation Asteroid had been invaded by large half-robot, half-organic rodents. These cyborg-rats avoided people, poison, traps, magnets, and cats, but had no fear of the ten-week-old kitten.

Osgood was regaling Ann with stories from his years as a galactic protocol expert when the kitten entered, yowling and running back and forth in a distracting manner.

"What's the matter with Theocat, Ann?" Osgood asked. "Is he trying to tell us something?"

"Oh, just ignore him," she sighed. "He's full of sound and furry, but signifying nothing."

At that moment a rat whizzed into the parlor, bit Theocat on the tail, and whizzed out.

"There, there, poor baby," Osgood said, trying to comfort the distraught kitten. "We must stop their tormenting him."

"I suppose you're right." Ann gazed thoughtfully out the window at Jupiter, the current view.

Within the week the cyborg-rats had disappeared. Theocat, no longer terrorized, was his old, obnoxious, furniture-scratching self.

"The patter of little metal feet is gone but not forgotten," Osgood remarked as he removed the kitten's claws from his sleeve. "How did you get rid of the rats?"

Ann shrugged. "With drugs. I used massive doses of antibionics."

V. Rabble Without a Cause

The populace of the ninth planet was socially apathetic. The only event which consistently caused excitement was the annual dinosaur race, when the Plutonians could bet upon their favorite saddle-saurs.

The citizens decided to make life more interesting by forming two political parties: the Plutocrats, interested in the political aspects, and the Publicans, interested in the partying. Each group immediately initiated campaigns designed to annoy the other.

Pluto's main industry, of course, is tourism—the planet is a favorite resort for governesses on a budget and for criminals avoiding extradition. The Publicans announced a plan to establish Customs inspections. The Plutocrats pointed out that this would entail searching every crook and nanny.

Next the Plutocrats suggested a law requiring citizens to be fully dressed whenever in public. The opposition countered that this betrayed their right to bare arms.

Dr. Ann Atomic and Osgood Ascanby read about the Plutonian situation in the *Martian Daily Chronicle*. "If things go on, there'll be civil war," Osgood commented. "Unpleasant, though decidedly better than an incivil one."

"You're one of the most powerful men in the galaxy. Can't you prevent this unpleasantness?"

"There are some things beyond the power even of galactic restaurant critics," he answered gravely. "But I'll give it a try. . . ."

He proceeded to meet with the leaders of the Publicans and Plutocrats, explaining to them that their divisive behavior would soon undermine tourism and destroy their economy. And, he suggested gently, a poor review of their planet would precipitate similar disastrous events.

Before the week was out, both parties had dissolved and the people

of Pluto were once more apolitical and peaceful. "Amazing!" Ann said, pointing to the headline of the morning paper. "War on Pluto is now considered unlikely. How did you reconcile them, Osgood?"

"In my usual quiet and polite way."

"Ah yes," she nodded. "Proving once again that couth is stronger than friction."



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H1ABK4

Improbable Bestiary: THE CHINESE DRAGONS

We three be three

Dragons of Kiangsu:

Lung Wang Hao,

Shen-lung Po,

T'ien Lung Fu.

Those who give us rice cakes,

Honey cakes and tea,

They shall know good fortune: 'tis our prophecy.

*I. T'ien Lung Fu, green
three-clawed dragon,
who guards the
household*

Sentry of the house and keeper of the portals;

Woe to any demon who attempts to enter here.

I am the Protector, guardian of mortals,

I attend the infant when his mother is not near.

Sleep, little *hsiao t'zu*, innocent and frail,

Sleep, while I rock your cradle with my tail.

I shall guard the house while watching over you . . .

Oriental gentleman, T'ien Lung Fu!

*II. Shen-lung Po, black
four-clawed dragon,
who brings the rains*

Thundermaker lizard, masterful and proud,

Flying over mountains in a black and silver cloud.

Feed me tea and ginger roots, and I shall bring the RAIN

For apricots and grain . . .

See you do not anger me, or I shall bring the FLOOD

For tidal waves and mud . . .

Riverkeeper waterlord, master of the flow . . .

Rain lizard, vain wizard Shen-lung Po!

*III. His Imperial Excellency
the Lord Most High
Lung Wang Hao, golden
five-clawed dragon who
is very like a god*

From far Kiangsu in the China Sea
I bring to those who honour me
Peace and pleasure, truth and treasure.
Happiness beyond all measure.
Light the incense, strong and sweet
For the Dragon-Lord elite.
From High Tibet to old Hankow
Venerate me: Lung Wang Hao!

*IV. The dance of the
dragons*

Play the silver bells and blow the golden reeds,
Summon twenty ministers to see to all our needs.
Serve us well and we shall bring prosperity to you:
 Lung Wang Hao,
 Shen-lung Po,
 T'ien Lung Fu!

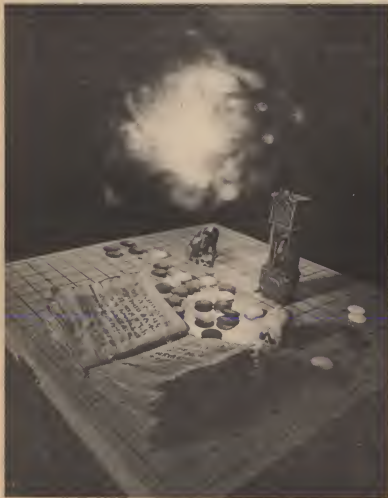
—F. Gwynplaine MacIntyre



ISOLATED EVENTS

by John Stallings

art: Jim Thomas



Mr. Stallings is 32, married, and has two kids (a girl, 12, and a boy, 9). He also has three cats: Tigger, JC, and Gandalf. His wife sums him up as a computer freak (formal title: Senior Software Engineer), a games lover, and a constant reader. His personal motto: There are no simple problems, only elegant solutions. While this is not only his first sale but also the first story he ever submitted, it must be admitted this is the third version, following some editorially requested re-thinking and re-writing.

A solitary figure crested the horizon and paused, standing tall and proud as he surveyed the distant town. He was tired; he was hot and sweaty. His throat was parched, and the blowing sand stung his eyes and collected in the arches of his boots. But he was close. Purposefully, he strode onward, like a god casually strolling across hell.

"Have you got a fix on me?"

"Sure thing, Mike," a voice whispered in his ear. "You're about two kilometers from the first farm house and about three from the outskirts of town. How are you doing down there, anyway?"

"Hot. Damned hot. I feel like I'm being roasted alive."

"No wonder—your readout is well into the red. Glad I'm just a communications tech; you couldn't pay me to do your job."

"Yeah, well, it isn't really that bad. I volunteered, you know."

"Not me, buddy. I don't even like to think about why we're here. Doesn't it bother you, just a little, knowing what could happen to those people?"

Mike thought about it briefly. "Some," he replied softly, "but it worries me even more knowing what could happen to us. Remember the Arquana system."

"The children."

"Yeah, and no adults. So we sent in the scientists to investigate. And it took us almost ten years and a million dead to put the cork back on that one. And it was a hell of a lot closer than the history books admit. I know; my uncle was one of the ones who came back. My father was one who didn't."

"I didn't know. I'm—"

"It's alright. Forget it. But I'm here because I want to be, OK?"

"Sure, Mike. Sure."

The alarm clock beeped softly, then again, slightly louder. Captain Anson rolled over to shut it off, then quickly climbed out of his bunk, walked over to the command console and pushed a button.

"Communication," a voice replied.

"Report."

"Status normal, sir. Mike is approaching the first farm. There's a farmer nearby, working in the fields."

"Have you assembled the Contact Assist Team?"

"Yes sir, they've been on the bridge since 0800."

"Good. I'll be down as soon as I can take a shower and get dressed. Call me if anything unusual happens."

Ragged tufts of grass and scrub began to appear and Mike noted, gratefully, the transition from shifting sand to packed soil. The farmer still hadn't noticed him, or, if he had, wasn't inclined to leave his work to inquire of a stranger walking in from the desert. Mike kept on walking. A dusty dirt road started in front of the farm house and walking was about to get a lot easier.

"How are we doing, Bill?" the captain asked.

"Fine, sir. Mike just passed the first farm. He's got a road now and he's making pretty good time."

"What was the farmer's reaction?"

"Nothing, sir. He just kept on working. Mike says he's pretty sure the farmer looked up once and saw him, but if he did, he didn't show it."

"You should have called me."

"Sir?"

"I want to know anything, absolutely anything, that's out of the ordinary. I have to be able to guarantee that this planet is just what it appears to be: a simple, rustic colony left over from the First Empire. If anything, *anything*, unusual happens, I want to know about it. If you so much as say 'Hmm' to yourself, I want to know about it. And if a farmer shows a complete lack of curiosity while miracles are apparently happening all around him, then I sure as hell want to know about it."

"Yessir," Bill said with all the snap he could muster.

"And get the burr out of your ass. It is Mike's first solo and I am

the captain, so you'll do well to just humor me."

"Mike's a good man, sir."

"I'm well aware of that. If I weren't, he wouldn't be down there. But I'm still going to keep an eye on him. I don't take chances, not any."

Mike passed several more farms with farmers and field hands working the crops. No one even looked at him. He approached the first house at the edge of town and entered a narrow, twisting street. Suddenly, a small group of children burst noisily around a corner, kicking a ball along in front of them. Just as suddenly, they changed directions; and children and ball disappeared down a side alley. Mike walked on, alone, moving deeper and deeper into the tortuous maze of random turns and narrow streets, hearing the sounds of a boisterous town all around him, but seeing nothing.

"Any contact yet?" asked the captain.

"No sir. He hasn't seen anyone since he passed the kids."

"Damn!"

"We were able to get a fix on the language the kids were using. It's a derivation of Old Galactic. Mike's pretty sure he can fake it."

"Hmm. Well, that's something. At least that fits what we expected. But where in *hell* are the people? I don't like it. I don't like it at all. I want you to initiate the Priority One Alert Sequence. When you reach Level Three, put it on hold. Have the flight crews go on Full Alert and put the engine room on Standby. And put the monitor on the speakers. And send for some coffee."

Bill began flipping switches and relaying orders. Columns of green lights came on across the status board, indicating levels of readiness. Blue **hold** lights flashed steadily.

"Is it really that bad, sir, just because they're ignoring him?"

"No, it isn't that bad, but I don't understand it and what I don't understand worries me."

"Maybe they just don't like strangers?"

"Maybe. And maybe it's another Arquana, or Peregrine, or A-Celphi."

"But sir, they've *only*—"

"I know what they've *only*. Bear in mind that this is a military mission, no matter what it's supposed to look like. We don't need these planets, but we do have to make sure that they aren't a threat to the Second Empire. There's just too much at stake to be anything but cautious and conservative, damned cautious and conservative."

"But surely we owe them a chance, sir."

"Look, damn it, it isn't my job to differentiate between the merely curious and the potentially devastating. I have to decide if this planet gets a point nine clearance, period—nothing suspicious, nothing unusual. Then they can send it the do-gooders and the scientists. But until then, this planet is assumed to be armed, hostile, and dangerous. And we and it are both considered expendable. And I want to know where in hell the people are."

Mike rounded a corner and found himself on the edge of a large, open square. Three robed natives were standing on the far side of the square, facing him. Mike stood there for several seconds, describing the scene for the ship's benefit, and then began cautiously crossing the square. He could hear his boots scraping on the stone pavement. A bird twittered in the distance. Mike realized that he could hear nothing else. He approached within several feet of the natives and stopped. One of them stepped forward to meet him.

"Greetings to you and to Captain Anson," the native said, in flawless Modern Galactic. "Welcome to our fair planet."

"Priority One, *now!*" the captain snapped. "Launch the recovery teams. Have the engine room prepare for immediate departure."

Blue lights winked out on the status board. Red lights began flashing glaringly. Klaxons sounded throughout the ship.

For the first time since the contact had started, the captain sat down. Slowly, he collapsed into the chair and laid his head on the table. His face was ashen.

"And send for a medical officer," he muttered.

"Are you all right, sir?"

"No, I'm not all right," he whispered. "In three hours a full battle fleet is going to materialize out of hyperspace. An hour later this planet will be a smouldering ruin. And within twelve hours the sun will go nova. And I issued the orders. I feel shitty as hell."

LiSuu grew weary of waiting. Again, he repeated the koan of patience to himself. Would KwangChu never find a move, or admit that he could not? LiSuu attempted to return his concentration to the board between them and the pattern of small black and white stones, but he could find nothing worth studying. It seemed clear to him that there were no suitable moves, and so, also, no responses to consider. There was nothing to study. But KwangChu kept looking. LiSuu lifted a hand and a young novice glided silently to his

side, bowing low in deference to the priest.

"Bring me some wine, please, and a bowl of fruit."

The novice disappeared as silently as he had appeared, and LiSuu let his attention wander about the peaceful garden while he waited. He contemplated the careful patterns of sand and rock and trees and flowers, noting, once again, the harmonious blending of pattern and chaos. He became aware of the sound of water, faintly trickling into a pool, and wind chimes, ringing softly in the breeze. Insects buzzed and hummed in the lush flowers. It should have been relaxing; today LiSuu found it tediously static, like an endlessly repeated point in time.

KwangChu looked up from the board as the novice returned with the fruit and wine.

"I am sorry that I take so long, but it is a difficult position," KwangChu said.

"Old Man, the fault is my own. I am sorry that my lack of tranquility shows so badly. Do not let me hurry you. I will leave and come back later if I cannot control my mind."

"I would not be offended. I fear that I will be much longer; I was about to request a volume of the *Book of Changes*."

"Shall I summon a novice?" asked LiSuu.

KwangChu nodded acceptance of the offer. A novice appeared and was quickly dispatched to the Sacred Vaults. Several minutes later he reappeared with a very large book, about two feet tall, a foot wide, and perhaps six inches thick. It was bound in exquisitely hand-tooled leather, delicately inscribed with fine inlays of gold. KwangChu held it reverently for a moment before opening it. Carefully, he searched through the beautifully illuminated pages until he found what he wanted. He studied the board intently for several minutes, then closed the book and handed it to the waiting novice, requesting that he bring a different volume instead.

LiSuu had finished his wine. He stood up to leave. "Old Man, may you find the perfect move."

"And may we play the perfect game."

LiSuu returned, several hours later. KwangChu was still sitting at the board, but he appeared to be meditating. LiSuu approached quietly and studied the board. To his astonishment, he spotted a change. KwangChu had found a move. But it was an odd move; on the surface it looked very passive, bloodless, almost apathetic in its apparent lack of concern for the threats opposing it. Briefly, LiSuu wondered if KwangChu could have made a mistake. He sat down

and contemplated the board further. Slowly, comprehension dawned; the move was *sente*. It was a subtle threat, but a threat, nonetheless, and it could not be ignored; a response was required.

KwangChu stirred from his meditation, and LiSuu looked up at him.

"I have been studying your move, Old Man. As always, it is skillfully clever. By its very nature, it seems to leave nothing to defend, nothing to attack, while the possible responses are seemingly endless. Yet this is deceptive, for the move is *sente*—there is a threat, although you have hidden it well—and none of the responses seem to touch upon it. I have been trying to decide where it must all lead, but I find that my mind folds in upon empty air; and I fear that I, too, will need to consult the *Book of Changes*."

Mike crested the sandy dune and paused. He could see the distant town, like a shimmering smudge on the horizon. Nearer, he could make out farms and, possibly, people working in the fields. He was tired; he was hot and sweaty. But he was close, and he was high on the excitement and danger of his first solo contact. Purposefully, he strode onward, like a god casually strolling across hell.

"Have you got a fix on me?"

"Sure thing, Mike," a voice whispered in his ear. "You're about two kilometers from the first farm house and about three from the outskirts of town."

HaiSung leaned on his hoe to rest for a moment and studied the cloudless sky. It was already hot, even though only mid-morning, and would clearly escalate to blistering by noon. He looked at the few feet of irrigation ditch still remaining to be cleaned out; soon he would be through and on his way to market. It would be a good day for sitting in the shade, drinking cool glasses of josuki and selling his basava roots. He let his eyes sweep slowly across the lush fields as he smiled contentedly. It was then that he spotted the strangeness.

There was a solitary figure striding in from the desert. It was curious that he should appear so energetic, considering that there were no towns for several days' journey in that direction. HaiSung studied him intently for several minutes before returning to work, and then continued looking up, periodically, to check on the stranger's progress.

The figure was much closer now, almost close enough to hail, close

enough to tell by his clothes that he wasn't from around here. HaiSung considered calling out to him but hesitated; if he stopped to talk, he would be delayed in getting to town. Finally he settled for just waving and leaving the rest up to the stranger.

"The farmer waved. He appears to be of ancient Oriental descent. Ask the captain if I should go over and talk to him."

"Just a minute," a voice said in his ear.

"Nope. Captain says to wave back but otherwise to just ignore any farmers unless they approach you. The town is what he's interested in."

"Acknowledged."

Mike walked on, feeling more and more confident. Things were going fine, exactly as expected.

LiSuu had studied five different volumes of the *Book of Changes* in the last two hours, but could find nothing concerning the current position. He had attempted, again and again, to analyze the board, but always became lost in the labyrinth of possibilities. He was tempted to concede that the position was safe, but a nagging worry had slowly grown in the back of his mind and he stubbornly continued. The position felt too open, too inviting. There were too many responses and combinations of responses. And yet, he could not find a flaw.

Intently, he reexamined a possible line of play while KwangChu meditated quietly. He traced the intricate patterns of the attacks and parries which would follow; and he noted, in passing, adjacent patterns of stones where attacks would have been possible, had not their last move been *sente*. His eyes flickered across two adjoining attacks, and suddenly he spotted it: the two attacks, if played properly, would merge into an overwhelming threat. The *sente* of their last move was false, for if this attack were made, then their own threat would vanish and they would be forced to find a response. And there seemed to be no response. LiSuu went over it again, and then again, and then once again, until he was positive that he understood what would happen. KwangChu chose that moment to stir from his meditation; how he did that never ceased to amaze LiSuu.

"Honorable Master," LiSuu began.

KwangChu raised an eyebrow in contemplation of this sudden formality and waited.

"Would you consider the board with me?"

KwangChu nodded his head slightly.

"If a stone were placed precisely here, it would appear to me that we would ultimately suffer the loss of a large number of stones, with apparently no compensation possible."

KwangChu studied the proposed move for several minutes, then suddenly nodded. "Yes. Yes, you are right. I congratulate you on such an early recognition of a false line of play."

KwangChu leaned back in his chair to study the board more extensively. He sent for a volume of the *Book of Changes*, and then for another.

As Mike approached the edge of town, a group of young children spotted him and swarmed eagerly around him, excitedly peppering him with questions in Old Galactic.

"Did you cross the desert?" one of them asked.

"Where are you from?" asked another.

"What's your name?"

"Why are you here?"

"You sure talk funny."

"Do you want to play ball with us?"

"You look funny, too."

Mike answered their questions patiently, declining to play ball but managing, finally, to convey an interest in meeting their parents. Two boys, filled with a sense of self-importance, rushed off madly and returned shortly, dragging their curious, if somewhat reluctant, fathers behind them. Mothers and daughters could be seen peering out from behind gauzy curtains.

Mike and the two men talked for several minutes, interrupted frequently by the children's excited attempts to interject what knowledge they had managed to glean from the mysterious stranger.

"What do you wish from us?" one of the men asked.

"Only to establish the groundwork for trade," Mike said.

"I think we should take him to the priests," the other one commented for the third time.

"You are probably right," the first one admitted. "Come, we will take you to the temple."

The small procession proceeded slowly through the narrow streets. Friends of the two natives came out to inquire about what was happening and stayed to join the procession. Likewise, their friends came out to inquire and the procession grew larger and larger. Children ran ahead of the group, shouting and yelling about the stranger from the desert. Shopkeepers and customers began lining the streets

and joined the growing crowd as it passed by.

"They are like children," exclaimed one of the priests.

"Yes," replied the High Priest.

"Why are they so excited about a man from the desert?" asked another.

"They know, even though they know not that they know," said the High Priest.

"What should we do with them?" asked a third.

"Declare a holiday," said the High Priest. "They are too excited to go back to work. I will take care of the stranger."

The crowd reached the steps of the temple and parted to allow Mike to approach.

"Welcome, I am YaoTsun," the High Priest said as he led Mike into the temple. "News of your arrival precedes you. We have prepared cool drink and food, and there is a quiet garden where you can rest while we talk."

The cool, dark halls were a welcome relief from the searing sun, as was the quiet from the noisy crowd. Mike followed the High Priest deeper and deeper into the inner recesses of the temple. YaoTsun pushed open a massive wooden door onto a small, shaded garden of flowers and trees and sand and rock. Water could be heard faintly trickling into a pool. Wind chimes were ringing softly in a gentle breeze.

YaoTsun led Mike into the garden, past two priests seated around a wooden board covered with small black and white stones, to a simple granite table with two benches. Novices approached the table, bearing food and a jug of wine.

"How long have you been traveling?"

"For many days."

"How were you able to survive, alone, on such a long journey?"

"There are others. I was sent in alone so that you would not fear us."

"And what is it that you want?"

"Trade. To be friends."

"I am friends with many people that I do not trade with. Also, what would we have to trade that you would want?"

Mike paused for a minute, as if in deep thought, while he listened to the comments of specialists back on the ship.

"To be friends with someone, you must first know them, and trade

is a way to accomplish that knowing. What we trade is unimportant, although I'm sure that we can find something."

YaoTsun said nothing. Mike waited, politely, for several seconds and was about to add something else, when he noticed that YaoTsun's attention was focused on the two priests, seated at the game board across the garden.

KwangChu reached out and made a subtle change to the board, and then looked up at LiSuu's astonished face and smiled.

"Tell me what you think," KwangChu said.

LiSuu looked at the board carefully. The adjustment certainly seemed to counter the potential attacks. And they still had their threat; the move was apparently still *sente*. And yet—and yet the board looked so very similar to one which they had earlier discarded. But there was so little time, so very little time. It would have to do.

"Do you approve?" asked KwangChu.

"Old Man, you have outdone yourself. It is very clever."

KwangChu motioned for a novice. "We require the daily log of the *Book of Changes*," he intoned.

The novice hurried off and returned in a few minutes, with quill and ink. Following him was a priest bearing a golden tray. In the middle of the tray rested a small red book. KwangChu and LiSuu rose up to meet him.

"The board changes," intoned the priest.

"In search of the perfect game," replied KwangChu.

"Moves have been retracted."

"In search of the perfect move."

"What becomes of them?"

"Nothing."

"What caused them?"

"Nothing."

"What existence do they have?"

"They are isolated events."

"Record them, that we may remember."

KwangChu took the quill and opened the book to a fresh page where he entered the changes.

"May you find the perfect move," intoned the priest.

"And play the perfect game," replied KwangChu.

The priest turned and walked off, taking the book with him. KwangChu and LiSuu sat back down and began studying the board, searching for a possible reply to the new position. After a few minutes, LiSuu requested a volume of the *Book of Changes*.

"What was the significance of that ritual?" inquired Mike.

"It honors the game and the discarded lines of play," answered YaoTsun. "We believe that we can understand the truths of the universe by studying the truths of the game."

"My land can offer you many new truths."

YaoTsun thought about that. "It will be an honor to learn them, as long as they do not conflict with truths we already have."

"How could that be? Truths are universal."

The High Priest studied him for a moment, as if trying to fathom Mike's soul. "You are not of this world."

Mike turned suddenly to look at the priest. "Why do you say that?"

"Your clothes, your accent, some of the words you use. Besides, we are in contact with the communities of our world. But, mostly, it is your lack of awareness of the game."

Several nervous people on board the ship pondered how Mike should reply. Mike tried to look thoughtful. He noticed that his pulse had quickened and that adrenalin was sweeping across his body. He looked at the High Priest; YaoTsun smiled. Finally, a decision was reached.

"You are right. Can I assume from your perceptiveness that you have records of the days when you had many such visitors?"

"We have records."

"My mission is the same. I am what I said I am. I came in disguise only to avoid panicking your people."

"It is only fair. We have been less than honest with you, also."

Mike felt a chill run down his back. "In what way?"

"We have been expecting you," YaoTsun replied in flawless Modern Galactic. "We, also, did not want to cause you to panic and risk the destruction of our planet."

Mike stood perfectly still, stunned. A small voice whispered in his ear, "Just hold on. We've initiated Priority One. The landing craft will be launched shortly. It should be about fifteen minutes before they can spray the area."

"Honorable Master?" LiSuu began. KwangChu looked up. "Would you consider the board with me?" KwangChu nodded agreement. "As long as a stone can be played here, we will still be in trouble. I believe our mistake may be further back."

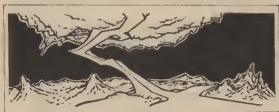
KwangChu studied the board for several minutes and then sighed heavily. He sent for a volume of the *Book of Changes* and then for another. Finally, he reached out to the board and made a radical and sweeping change.

"Do you approve?" ksked KwangChu.

"It would seem sufficient."

KwangChu motioned for a novice. "We require the daily log of the *Book of Changes*," he intoned.

A solitary figure crested the horizon and came striding across the hot, shifting, expanse of sand. Three vicious-looking, heavily-armed warriors rode out from the walled town and intercepted the stranger at the edge of the desert. The biggest, meanest, ugliest one of the three leaned over from his mount and demanded, in a derivation of Old Galactic, "Who the hell are you and what do you want?"



THIRD ANSWER TO THE BAGEL HEADS HOME (from page 108)

There is no known reason why the sun and moon should appear so nearly the same size from the earth. Astronomers regard it as sheer coincidence. There are so many millions of ways that remarkable coincidences like this can turn up in astronomy that a certain number should be expected. The sun-moon disk equality is simply one of them.

HEADLINES BY THE DOZENS (RIGHT IN MY OWN KITCHEN)

If even the smallest, very tiniest one of you—a speck bug, say,
Could somehow get yourself up to Mars,
Or Venus, say; or even the moon would do,
And wiggle your feelers just a little—
Just once up there would be enough—
And be found out doing it,
Oh WOW! how you would throw
The whole Scientific Establishment into such
A tizzy of glad discovery and madding sweet surprise
That it would take a boldface,
Giant lettering such as we right now
Don't even have the ghost of
To shout the headlines and exclaim the clues:
**LIFE ON MARS!! VENUS IS VITAL!!! THE MOON HAS
BUGS!!!!**

But sadly, oh sadly, little exploring guys,
You're here and I don't have
Any way in all the world, that I
Can figure out, to get you,
Even the tiniest teeniest one of you,
Up to Mars or Venus, say;
(Oh, even the moon's too far!) So it's the Black Flag,
I'm sorry. And the Real Kill, I'm sorry.
And also a shot of Raid,
If you don't all leave soon,
Or anyway, pretty soon, and quit
Hopping around, across, and up and down
My eatables as though they all were somewhere
In the Sea of Tranquility and you,
Each and every one, were moon-based
Neil Armstrongs and Buzz Aldrins—headliners
With Collins—sashaying like kangaroos! SORRY . . .

—David R. Bunch

DEATH IN VESUNNA

by Eric G. Iverson & Elaine O'Byrne

art: Karl B. Kofoed



Mr. Iverson tells us that it's all the fault of L. Sprague de Camp and his book, Lest Darkness Fall, that he wound up with a doctorate in Byzantine history from UCLA, and—eventually—wrote this story (which, however, is set in the western end of the Roman Empire, in Gaul, during the reign of Antoninus Pius, around A.D. 150). The story's co-author, Ms. O'Byrne, is a Senior Executive Secretary with a large aerospace firm, working for the man who invented the laser. She is also a violinist with the local symphony orchestra, occasionally belly-dances, and once had a brief fling with cabinetmaking.

"More wine, gentlemen?" Clodius Eprius asked, eyeing his two guests with faint distaste. He had wanted to leave for his country estate to supervise the harvest, but this dinner meeting was keeping him stranded in Vesunna like some vulgar lampseller. When both men nodded, he sighed and rose from his couch. Picking up the red earthenware jug, he filled their cups and poured himself a hefty dollop as well.

All drank; the two strangers murmured appreciatively. That warmed Eprius a little. He said, "It's not Falernian, but this is a fine vintage. It was laid down the year Hadrian died, eight—no, nine years ago now. A fine vintage," he repeated. "Do you know, they're even shipping our Aquitanian wine to Britain these days."

"Really?" One of his visitors, a short blondish fellow who called himself Lucius, looked interested. His comrade kept his nose in his cup. A tall, solidly built man with hard, dark eyes, he had not said three words all through dinner. Lucius had introduced him as Marcus.

For no reason he could name, Eprius's guests disturbed him. It was not their accent, though Lucius, who did most of the talking, flavored his Latin in a curious fashion. No, the way they looked at their surroundings nettled their host more. Itinerant booksellers like these men would have seen many splendid villas in their travels, to be sure. Eprius knew his house would not have seemed imposing to anyone newly come from Rome or Antioch. But a fountain laughed

in the courtyard, and the statues around it were good work. So was the hunting scene picked out in mosaic on the dining room floor; craftsmen from Rome had created it. His home was no hovel. It did not deserve Lucius's patronizing stare or the contempt Marcus scarcely bothered to conceal.

He drained his wine. "Well, good sirs," he said, "you told me you had a proposition I might find interesting, could it be kept in sufficient privacy. I have met your request. My servants are already at my other home, and I've given my valet the evening off. I am at your disposal, gentlemen. How do you wish to entice me?"

"We thank you, my friend," Lucius replied, "for a fine meal, and for the kindness you have shown two men you do not know. We will think your courtesy limitless indeed if you answer one question for us."

"Ask, sir, ask."

"I am sure you know Vesunna is not a town to which we usually travel, fine though it may be. But while we were in Massilia we heard a rumor so astounding, if true, that we hurried north to investigate."

"You have not asked your question," Eprius pointed out. There was a tinge of smugness in his voice, and Lucius did not miss it.

"It's true, then. You do have a copy of Sophokles's *Aleadaï*?"

"And if I should?"

"May we see it?" For the first time, Lucius displayed real eagerness. Even Marcus's dour features almost smiled.

"I keep it in my private suite. Wait here a moment, if you will." Taking a lamp to light his way, Eprius bustled out of the dining room, down the hall, and into his sanctum. The first thing he spied there was a stout walking-stick. He seized it gratefully, for he had been a trifle lame since falling from a horse a couple of years before.

He shuffled rolls of papyrus, finding book three of the *Aeneid*, book one of the *Iliad*, a bill from the sheep-doctor Valèrius Bassus ("Damn it, I thought I paid that two weeks ago!" he grumbled), book seven of the *Aeneid*, and, at last, the work he sought. A copy of the *Aleadaï* had been in his family for almost three hundred years. One of his ancestors had been a centurion in Lucius Mummius's army when that general sacked Corinth, and had taken the original document as part of his loot. Finding that the ravages of time had made it almost illegible, Eprius's grandfather had had it recopied. It had been rare then; Eprius still recalled the old man chuckling as he described the surprise of the copyist who redid it. He could well understand booksellers coming a long way in search of such a work.

Lucius took the roll like a lover carressing his beloved. Yet he handled its spindles clumsily, almost, thought Eprius, as if he were not used to unrolling a book to read it. Don't be a fool, he told himself: a book-dealer sees more books in a month than you will in ten years. The wine has simply made his fingers awkward. He certainly reads well enough—he isn't even moving his lips, which is more than you can claim for your reading.

A passage seemed to please the stranger, who began to read aloud. His accent was, if anything, stronger in Greek than in Latin, but he paid scrupulous heed to the complex meter of the tragedian's verse. Despite himself, Eprius was impressed.

Lucius read silently once more, faster and still faster, whipping through the scroll now with a speed that left Eprius blinking. A lamp went out, but Lucius never noticed. He read aloud again:

"'Stop! It is enough to have been called father,
If indeed I begot you. But if not, the harm is less,
For what one believes carries more weight than the truth.'"

He turned in triumph to Marcus. "That clinches it!" he said. "This is one of the sections Stobaeus quotes, and this is the genuine *Aleadaï*!"

"Of course it's genuine," Eprius said in aggrieved tones. These fellows had approached him. Did they now think he was trying to cheat them? And who was Stobaeus? The name was not familiar.

Neither of his guests was listening to him. They sprang from their couches (Lucius carefully put the *Aleadaï* down first) and capered about in ridiculous fashion. They slapped each other's backs, swatted each other's palms, and clasped each other's wrists, the while making interlocking rings of thumbs and forefingers. Barbarians after all, Eprius thought.

Little by little they calmed down. Marcus's glee subsided into wariness, but Lucius's face was lit by that special joy felt when something long sought is at last found. "This is indeed a treasure," he said. "What price would you put on it?"

Eprius smiled. "A curious sort of merchant you are, to let a prospective seller know how much you esteem his goods."

Marcus looked alarmed, but Lucius said smoothly, "Under any other circumstances you would be right, but not today. You see, I have a standing offer for this work from a gentleman at Rome whose name I am sure you would recognize were I at liberty to disclose it. Quite a sizeable offer, in fact."

That made sense. Many senators and other officials were zealots in the pursuit of culture. Eprius nodded, and as he did Marcus's watchful mask settled back over his face. "How sizeable an offer?" Eprius asked.

"Large enough so that I can afford to offer you—hmm—seventy-five aurei and still turn a handsome profit."

"Seventy-five aurei?" Eprius tried hard not to show how startled he was. That was many, many times the going rate, even for a rare book. "A princely sum! Why is your unnamed patron so anxious to acquire the *Aleadai*?"

"It is the only play of Sophokles he lacks."

"Come now, do you take me for an utter idiot? I doubt if even the library of Alexandria could make that claim. My friend, I do not know what your game is, but find someone else to play the dupe."

"Do you think we are trying to defraud you? This will persuade you otherwise." Lucius drew out a leather purse and tossed it to Eprius. He opened it. Ruddy in the lamplight, goldpieces spilled into his palms. They clinked sweetly.

"Well, well," he said at last. "I owe you an apology, good sirs, both for what I said and what I thought. Let me take the roll to our local copyist, and you may have either the original or the copy within a week, just as you please. Aemilius Ruso is a friend of mine; I assure you he has a fine hand, and he is careful too."

"I am afraid that won't quite do, friend Eprius. A condition of the sale is absolute privacy, and it is a condition on which I have no discretion whatever. We must have this work now. Is the price inadequate? I can sweeten it a bit, I think."

"'Money buys men friends, and honors too.' So says the poet in this very play. But money will not buy the only copy of the *Aleadai*, for it has been an heirloom in my family for eleven generations. I see no reason not to share it, but I will not give it up."

"A hundred aurei?"

Eprius' face froze. He refilled the purse and threw it at Lucius's feet. "You insult me, sir. I must bid you a good evening." He held out his hand for the play.

Reluctantly, Lucius began to give it back to him, but Marcus reached out and held him back. His smile and his heavily-accented voice were deliberately offensive. "I think we keep this," he said.

"What? Get out, you rogues, you lashworthy rascals!" Despite graying hair and growing paunch, Eprius was still fairly quick on his feet. His walking-stick thudded down on Marcus's shoulder. The *Aleadai* fell to the floor. "Get out, robbers, get out!" Eprius shouted.

"Bastard!" Marcus snarled. He ducked the next swing of the stick. Stars exploded inside Eprius's head as a solid right sent him spinning back over his couch to the floor. Somehow he held onto his stick. Too angry to fear facing two younger men, he surged forward, crying, "Thieves! Thieves!" at the top of his lungs.

Marcus's hand snaked under his tunic. Eprius saw it emerge with a curiously-shaped metal object. One of Marcus's fingers twitched on it, and Eprius heard the beginning of a barking roar. Something sledged him in the forehead, and he never saw or heard anything again.

Lou Muller, who in Vesunna called himself Lucius the book-dealer, stared in horror at the crumpled corpse that had been Clodius Eprius. The gunshot still seemed to echo in the room. "Jesus H. Christ, Mark!" he said, and he was not speaking Latin at all. "The Patrol—"

"Lou, you can take the Patrol and stuff it right on up—" Mark Alvarez tucked away the pistol and rubbed his shoulder. "The old son of a bitch damn near broke my collarbone. What was I supposed to do, let him yell until all the neighbors came? Speaking of which—" He scooped up the *Aleadai* and trotted into the street. His partner followed, still expostulating.

"Oh, shut up and listen to me, will you please?" Alvarez growled. "Why do we make a good team, anyway? It's not just because you're the fellow who knows his way around the second-century Empire and I'm the one with the pull to get a timer. I've got the brains to get you out of trouble when you screw up, which you did. For one thing, even I know—you've told me often enough—Stobaeus isn't going to be born for a couple of hundred years yet. For another, and worse, that geezer was never going to sell us the play after you got his back up."

"But I offered him seventy-five aurei!"

"That didn't impress him, now did it? And it doesn't impress me either. What're seventy-five aurei to us? Thirty credits for the gold (always thanking God for fusion-powered transmutation), the same for some authentic molds, and voilà! Aurei! Whereas we can—and we will—get an easy fifty thousand credits for a lost play of Euripides."

"Sophokles," Muller corrected absently.

"Whatever. And as for the Time Patrol, why are we here in the boondocks instead of at the library of Alexandria? Why do we insist on so much privacy when we make our deals? Just so they won't

run across us. And they won't. Erasing this fellow won't leave any clues downtime. We don't change anyone's ancestry, because his wife's been dead for years. We *did* check him out, you know." He glanced over his shoulder. "Did anyone see us leave?"

"I don't think so. But my God, Mark, a bullet—"

"What about it? Nobody here will ever figure out how he died. The local yokels'll call it the wrath of the gods or something and then they'll forget it. All we have to do is sit tight for three weeks until the timer recharges and then it's back to 2059 and lots of lovely money."

"I suppose so," Muller agreed slowly. "I kind of liked old Eprius, though."

"Liked him? Lou, he was just a stupid savage, like all the other stupid savages here and now. Look around. Is there anything here but filth and disease and superstition? You couldn't pay me to time if it weren't for xanthomycin. Come on, let's get back to the inn. Like the fellow said, my man, the play's the thing, and we've got it."

"What about the gold?"

"You want to go back and get it? Relax, it'll confuse the issue anyway." They walked on in silence until they came to the inn. "What a dump," Alvarez sighed. "Oh well, at least it has a bed, and I need sleep right now. We've had a busy night."

The sound of a fist crashing against his door hauled Gaius Tero from the depths of slumber. Stifling a curse, he climbed out of bed and threw on a mantle. His wife stirred and muttered drowsily. "It sounds like business, Calvina," he said. "Go back to sleep." A forlorn hope indeed, with his door being battered down. "I'm coming, I'm coming!" he shouted, and the pounding stopped. As tesserarius of Vesunna's seven-man detachment of vigiles, he wondered what had gone wrong now. Had someone knocked over Porcius's wineshop (again!), or had Herennius Fundanus's firetrap of a stable finally decided to go up in smoke? Either way, the responsibility fell on him, for the vigiles were constabulary and fire brigade both.

He threw open the door. Just as he expected, there stood the panting figure of Larcus Afer, who had the watch tonight. "Well, what is it?" Tero demanded, adding hopefully, "I don't smell smoke." The siphon, which was the city's chief fire-fighting implement, was a pain in the fundament to deploy and use.

"No, sir," Afer agreed. He paused to wipe sweat from his face. The night was warm, and he had plainly run some distance. Tero, who

was not the most patient of men, glared at him until he continued, "Clodius Eprius has been killed."

"What do you mean, killed? Has he been murdered?"

"Killed, sir," Afer repeated stolidly. "Kleandros is with the body now. He'll be able to tell you more than I can, I'm sure."

"Obviously," Tero snapped. Still, he was glad the Greek doctor would be there. They were old friends, though they argued constantly.

The tesserarius ducked back into his house for sandals, then accompanied his fellow vigil to the dead man's home. It was a couple of hours before dawn, and a waning crescent moon shed a wan light over the town. Nevertheless, it was dark enough to make Tero glad his companion carried a torch.

Eprius lived (or rather, had lived) at the opposite end of town from Tero's home. He and Afer tramped through Vesunna's central forum, silent save for the sound of their footsteps. At its very heart was the temple dedicated to the city's tutelary gods. Its huge circular cella made it currently the biggest structure in Vesunna, but the amphitheater being built not far away promised to dwarf it and everything else in the town.

Tero wondered idly what the old Petrocorii, the Celtic tribe who had founded Vesunna, would have thought of such an incredibly huge edifice. Magic, without a doubt: anything was magical to someone who did not know how to do it.

His thoughts turned back to Eprius. Why would anyone want to kill the old fool? Tero knew him fairly well, and also knew he had not a single enemy in town. Had some footpad done away with him? Tero tried to pump Larcus Afer; but Afer shook his head, saying, "You'll have to see for yourself, sir." With a small shock, the tesserarius realized his subordinate was frightened. That was very strange. Before settling in Vesunna, the two of them had served together on the Rhine, and Tero knew full well that the skirmishes there had thoroughly inured Afer to the sight of gore.

It seemed as if most of Eprius's neighbors were gathered outside his front door. Well, Tero thought, that's scarcely surprising. Everyone started talking at once when they saw him, raining questions down on his unprepared head. "I don't know a damned thing yet," he said, pushing his way through the crowd. "If you'll let me by, maybe I'll find out something."

Kleandros met him at the entrance. Tero liked the sharp-tongued physician. They had worked together before; and once or twice a month they would meet for wine, a friendly game of draughts, and

much good talk. Still, the doctor's elegant slimness always made the squarely-built Tero feel like a poorly-trained dancing bear. Just by standing before him, Kleandros made him suddenly and acutely aware of his own uncombed hair, the patches and stains on his cloak, and the ragged bit of leather hanging from one sandal. As usual, he disguised his feelings with raillery. "Hello, quack," he said. "What do you have for me today?"

An opening like that would normally make Kleandros sputter and fume, but today he did not rise to the bait. Under the curling black ringlets he combed low on his forehead, his face was grim as he answered, "Hello, Tero. I'm glad to see you. You'd best come look for yourself." He was speaking Greek instead of Latin, something he did only when very upset. Tero began to worry in earnest.

The physician led him down the dark entry-hall to the dining room. Someone had refilled and lit all the lamps there; the flames cast multiple dancing shadows. Three couches had been grouped together in one corner of the room. One was overturned, and the wall behind it bore a sinister stain. The vigil looked a question at Kleandros, who nodded. "Poor Eprius is behind the couch," Kleandros said. "Tell me what you make of him."

"Why me? You're the doctor," Tero said, but he walked around the couch.

Both on the Rhine and as a vigil in Vesunna, Gaius Tero had seen the results of more violent deaths than he liked to remember. Yet the corpse in this quiet room shook him in a way none of the others, however grisly, ever had. He was in the presence of the unknown, and little fingers of ice crawled up his back as he viewed its handiwork.

Eprius's body lay on its right side; its right hand still clutched a stick. Tero barely noticed, for his gaze was fixed in horrified fascination at the ruin that had been its head. There was a neat hole about the width of Tero's little finger over the left eye. A small stream of blood ran down over Eprius's face to join the pool beneath his head. Already flies were beginning to buzz about it.

Bad as that was, it was far from the worst. Whatever had drilled through Eprius's forehead had smashed out through the back of his head, tearing his skull open from the inside out. Much of the left rear quadrant of his head was a sickening soup of brain, pulverized bone, scalp, and hair. It was that which had stained the wall; blood cemented the gory fragments to the plaster.

The hobnails of Larcus Afer's sandals clicked on mosaic tiles as he came up. Dread was on his face; his fingers writhed in a sign to

avert evil. "It was Jupiter's thunderbolt slew him," Afer said. "Two or three of the neighbors heard him cry out, and then the terrible roar of the thunderbolt itself—and not a cloud in the sky. His man Titus had the evening free, and when he got home he found this."

Tero had never been one to fear the gods unduly, but he felt the little hairs on the back of his neck trying to rise as he listened to Afer. Surely nothing in his experience could have produced the ghastly wound he saw. To have Kleandros throw back his head and laugh was unbelievable. Tero wondered if the doctor had taken leave of his senses, and Afer stared at him indignantly.

"How many men have either of you known to be killed by the gods?" Kleandros demanded. "I've been a doctor for twenty years now, and I've never seen one yet."

"There's always a first time," Afer said.

"I suppose so," Kleandros conceded. "But Clodius Eprius? Good heavens, man, use your head for something more than a place to hang your hair. The worst thing Clodius Eprius ever did in his whole life was to drink so much wine a couple of his friends had to carry him home. If the gods started killing everybody who did that, why, there wouldn't be five men left alive in the Empire by this time tomorrow. No, I'm afraid that if the gods left it to Nero to kill himself and soldiers to do away with Caligula, they wouldn't have much interest in Clodius Eprius."

Afer was still far from convinced. "What did kill him, then?" he demanded.

"I haven't the slightest idea right now, but I intend to try to find out instead of moaning about Jupiter."

The physician's healthy skepticism gave Tero the heartening he needed to shake off his superstitious fear and begin thinking like a vigil once more. He quizzed Eprius's neighbors, but learned nothing Afer had not already told him. There had been shouts and then a crash, but nobody had seen anyone fleeing Eprius's home. Titus proved even less informative than the neighbors. He was grief-stricken and more than a little hung over. When Eprius gave him the night off he had not questioned his master, but headed straight for the wine and girls of Aspasia's lupanar, where he had roistered the night away. When he came back and found Eprius's body he rushed out to get Kleandros, and that was all he knew. Tero left him sitting with his head in his hands and went back to the dining room.

"Learn anything?" Kleandros asked.

"Nothing. Maybe Jupiter did kill him."

Kleandros's one-word reply was rude in the extreme. Tero managed an answering grin, but it was strained. His eyes kept going back to the redly-spattered wall. In the midst of the spatters was a ragged hole. "What's this?" he said.

"How should I know?" Kleandros said. "Maybe Eprius used to keep a tapestry nailed there, and was clumsy taking it down."

"I don't think so. I've been here more than once, and I don't remember any wall hangings." Tero took a knife from his belt and chipped away at the plaster, enlarging the hole. At its bottom was a little button of metal. No, not a button, a flower, for as Tero dug it out he saw that little petals of lead had peeled back from a brass base. Never in all his years had he seen anything like it. He tossed it up and down, up and down, whistling tunelessly.

"Give me that!" Kleandros said, grabbing it out of the air. He examined it curiously. "What is it, anyway?"

"I was hoping you could tell me."

"I couldn't begin to, any more than I could begin to tell you what killed Eprius."

Something almost clicked in Tero's mind, but the thought would not come clear. "Say that again!" he demanded.

Kleandros repeated.

He had it. "Look," he said, "where did we find this strange thing?"

"Is this your day to do Sokrates? Very well, best one, I'll play along. We found this strange thing in a hole in the wall."

"And what was all around the hole in the wall?"

"Clodius Eprius's brains."

"Very good. Bear with me one more time. How did Clodius Eprius's brains get there?"

"If I knew that I wouldn't be standing here pretending to be Euthyphron," Kleandros snapped. "I've seen a fair number of dead men, but never one like this." He looked at the piece of metal in his hand and his voice grew musing. "And I've never seen anything like this, either—you think the one had something to do with the other, don't you?"

Tero nodded. "If you could somehow make that thing go fast enough, it would make a respectable hole—it didn't make a bad hole in the wall, you know."

"So it didn't. It probably used to have a tip shaped more like an arrowhead, too; that lead is soft, and it would get smashed down when it hit. See what a brilliant pair we are? We only have one problem left: how in Zeus's holy name does the little hunk of metal get moving so fast?"

"Two problems," Tero corrected. "Once you get the little piece of metal moving, why do you use it to blow out Clodius Eprius's brains?"

"Robbery, perhaps?"

"Maybe. Titus should know if anything is missing. Until he can figure that out, I think I'm going home and back to bed. Wait a moment, what's this?" Almost out of sight under one of the couches was a small leather bag. Tero stooped to pick it up and exclaimed in surprise. It was far heavier than he'd expected. He knew of only two things combining so much weight with so little bulk, lead and—he opened the bag and aurei flooded into his hand.

"So much for robbery," Kleandros said, looking over his shoulder. The images of Trajan, Hadrian, and Antoninus Pius looked mutely back, answering none of the questions the two men would have put to them. The only time Tero had ever held so much gold at once was when he'd got his mustering-out bonus on leaving his legion.

He looked up to find Kleandros still studying the coins, a puzzled expression on his face. "What now?" Tero asked.

It was the doctor's turn to have trouble putting what he saw into words. "Does anything strike you as odd about this money?" he said at last.

"Only that no robber in his right mind would leave it lying under a couch."

"Apart from that, I mean. Is there anything wrong about the money itself?"

"An aureus is an aureus," Tero shrugged. "The only thing wrong with them is that I see them too seldom."

Kleandros grunted in exasperation. He plucked an aureus of Trajan from the pile in Tero's hand and held it under the vigil's nose, so close that his eyes started to cross as he looked at it. Tero shrugged again; to him it seemed like any fresh-minted goldpiece. He said so.

"To me too," Kleandros said. "And that is more than a little out of the ordinary, since Trajan has been dead—what is it? Thirty years now, I think. I was somewhere in my teens when he died, and I'm far from a youth now, worse luck. Yet here is one of his coins, bright and unworn. More than one, in fact," he said, picking out three or four more. They lay in his hand, like as peas in a pod.

And that was wrong, too. No coin had the right to be identical to its fellows; they were stamped out by hand, one at a time. There were always differences, sometimes not small ones, in shape and thickness. Not here, though. Both men noticed it at the same time, but neither was as disturbed as he would have been a few hours

before. "Everything we've found here is impossible," Tero said, "and this is just one little impossibility among the big ones."

It was growing light outside. Tero swore disgustedly. "I might as well stay up now. Care to join me for an early cup of wine?"

"Thank you, no. But if you don't mind, I'll cadge a meal from you and Calvina this evening. We can talk more then, and maybe squeeze some sense from all this."

"I doubt it, truth to tell. But I'll expect you a little past sunset."

"Fine."

Tero swallowed his last morsel of ham, wiped his fingers, and sighed loudly. "Why did I ever quit the legions?" he said. "I'd twenty times rather fight the German lurking in his gloomy forest than face another day like this one."

"That bad?" Kleandros asked between bites of apple.

"You should know—you started me on it." The vigil did not feel right about dropping all his troubles on his friend, but he had had a bellyful. The story of Clodius Eprius's death had raced through Vesunna, gaining fresh embellishments with each teller. It did not take long for people to be saying all the twelve immortals had visited the town, destroying not only Eprius but his house and those of his neighbors, too. More than one panicky citizen hastily packed up his belongings and headed for the country.

None of that sat well with Vesunna's two duumvirs, and both of those worthies came down heavily on Tero, demanding he find the murderer at once. "What will this do to the name of our city?" said one, though Tero knew what he meant was, I do not want my year in office recalled only for a gruesome killing. He promised to do his best, though he had few illusions on how good that was going to be.

Late in the afternoon, Eprius's servant Titus came in with two more bits of depressing news: first, the gold the vigil had found was definitely not Eprius's; and, second, as far as he could tell after a quick search, nothing was missing from his late master's home. Larcius Afer was there to hear that, and his superior smile made Tero want to kick him in the teeth.

That he did tell Kleandros; it galled him too much for silence. The doctor pursed his lips and said judiciously, "If a fool laughed at me, I'd take it for a compliment."

"So would I, were I sure he was wrong. But what do we have here? A murder committed for no reason with an impossible weapon that produces an incredible wound. I think I'd rather believe in an angry god."

"Who leaves behind a purse full of counterfeit aurei? No god would do that."

"No person would, either," Tero pointed out. "And they aren't counterfeits, either; they're pure gold. Rusticius the jeweler checked them for me this afternoon."

"Did he? How interesting. Yes." Kleandros said nothing more, but a look of satisfaction spread across his face.

"You know something!" Tero accused.

"I have some ideas, at any rate. Did I ever tell you that I studied medicine under Diodoros of Alexandria?"

There were times when Tero found his friend's evasiveness maddening. This, it seemed, was going to be one of them. "No," he said, "you never did. Why do you see fit to impart this bit of information to me now?"

"I am coming to that, never fear. You see, Diodoros himself was learning his skill in Alexandria when Heron son of Ktesibios was at the height of his fame."

Tero had to admit he did not know the name.

"Do you not? A pity; he was a remarkable man, probably one of the finest machine-makers the world has ever seen. Diodoros was fascinated by his contraptions, and he never tired of talking about them. Really amazing things: a device for dispensing sacramental water that only worked when a copper was inserted, a trumpet made to sound by opening a nearby door, bronze animals that moved like live ones, and many other things."

"He sounds like a sorcerer."

"No, he was an artificer and nothing more. One of the things he made, not really more than a toy, was what he called an aeolipile."

"All of this must lead somewhere, I suppose. What might an aeolipile be?"

Kleandros explained: a water-filled cauldron was fitted atop with a hollow ball mounted on a hollow tube. Directly opposite the tube's entrance into the ball was a pivot, which was attached to the cauldron's lid. The ball itself was fitted with bent nozzles; when a fire was lit beneath the cauldron, steam traveled up the hollow tube and out through the nozzles, making the ball spin merrily. "Do you see what I'm getting at?" the doctor asked. "In this device the force of the steam escaped continuously; but if some way were found to block it up for a time and then release it all at once, it could give a little metal pellet a very strong push indeed."

Tero took another pull at his wine while he thought. The idea had more than a little appeal, for it gave a rational picture of how the

killing might have taken place. Still . . . "A cauldron, you say? How big a cauldron?"

"I have no idea. I've never seen the machine in action myself, only heard Diodoros talk about it."

"Somehow I find it hard to imagine Clodius Eprius letting anyone set up a cauldron in the middle of the room and then aim a little ball at him. And whoever would be using it would have to wait for his water to boil before it could go off, wouldn't he?"

"I suppose so," Kleandros said sulkily.

"Not only that, anyone hauling a cauldron through the middle of Vesunna will get himself noticed. Even if I don't know what killed Eprius, I can tell you a couple of things about it: you can use it right away, and you can carry it around without having it seen. I'm afraid your whatever-you-call-it misses the mark both ways." Seeing his friend's hurt expression, Tero went on, "If you could make one big enough, it might make a good ballista, though." I wonder why our generals never thought of anything like that, he thought, a little surprised at himself.

"Your logic is convincing," Kleandros said, adding, "Damn it!" a moment later.

"Let's give up on the weapon for now," Tero suggested. "It matters less than the person who used it. If we had some way of knowing who he was, we might catch him, thunderbolt thrower or no."

"A good point," Kleandros said. "Whoever he was, we can be fairly sure he was from outside the Empire."

"Why do you say that?"

"We know of no weapons to fit the bill within our land, do we? Also, why would a citizen need to carry coins that weren't genuine but would pass one by one? If they are true gold, that only makes the argument stronger."

"A spy!"

"You may have something there. But who would want to spy on Vesunna, and why?"

Tero opened his mouth for a reply, then realized he did not have a good one. No one had ever seen a German in the town, and Parthia was at the other end of the world. Besides, he was sure neither the Germans nor the Parthians had weapons that could blow large holes in men's head. If they did, they would have used them on Roman soldiers long ago. In fact, anyone who had such a weapon could master the world and surely would have done so by now. It made no sense at all.

What other foreigners were there? There were nomads south of

Roman Africa, and others east of the Germans. There was an island off the coast of Britain, but it was full of savages, too. There was—"Men from Atlantis, perhaps?"

"My dear Tero, I would be the last to deny Platon was a man of godlike intellect, and the *Timaios* has always been one of my favorite dialogues. Still, as far as I can see, in it he invents Atlantis in order to portray an idealized way of life. And, as Aristoteles said, 'He who invented it destroyed it,' for, if you'll remember, Platon says it sank beneath the waves thousands of years ago."

"That's a pity, because I don't see how a spy could come from any country we know well." He explained his reasoning to the doctor, who nodded.

"Where does that leave us?" Kleandros asked.

"Right where we started—ramming our heads into a stone wall. A plague on it, for now. Did you bring your *Iliad* with you? I'd sooner bend my brain around that for a while." Slowly but surely, over the course of years, Kleandros was teaching the vigil to read Greek; most cultured citizens of the Empire were bilingual. Tero spoke Greek fairly well: though more elastic, its basic structure was much like that of Latin; and there were more than a few similarities of vocabulary as well. But Homer was something else. His hexameters were splendid, his picture of the heroes of the Trojan war supremely human, but his antique vocabulary and archaic grammatical forms often made Tero want to tear his hair.

Line by line they fought their way through the opening of book sixteen, where Patroklos begs Akhilleus to let him borrow his armor and drive the Trojans from the ships of the Akhaians, which they had begun to burn. Akhilleus, hesitant at first, assented when he saw the fire going up, and

"Patroklos armed himself with shining bronze."

("I hate these funny-looking datives," Tero said, but went on:)

"First he put well-made greaves on his calves;
They had guards of silver on them.
Then on his breast he put the cleverly-made shining
Corselet of Aikos' swift-footed scion.
He slung his silver-nailed bronze sword from his shoulder,
And after it a great stout shield as well."

"Bronze, bronze, bronze!" Tero said. "Bronze this, bronze that. One

cohort of my legion could have gone through all the heroes of the Trojan War, Akhaians and Trojans both, in about an hour and a half. Ten years? No wonder it took them ten years, with tactics like theirs. They run at each other, throw their spears, and then start looking for rocks to fling. And nobody cares about the fellow next to him until the poor sod gets a spear in the groin. Then they fight over his armor, not him."

"You have the soul of a turnip," said Kleandros, who had heard Tero's complaints many times. "That we are better at killing people than they were in Akhilleus's day is no cause for celebrating."

"Nevertheless, I wonder what shining-helmed Hektor would have thought if one morning he woke up and found my old legion round his walls instead of those Akhaian cattle-thieves. Can you imagine it? Earthworks, siege-towers, catapults, rams. He couldn't have held that town three days against us. I think I'd have paid money to see his face."

"He probably would have been like Afer, convinced all the gods were angry at him."

"And yet we would just have been men with skills he didn't have, not demigods or heroes. It's very strange." Tero returned to his Homer and plowed on doggedly even after his attention began to wander. The truth was that he did not want to think about Eprius's corpse, though he suspected he would see it in his dreams for years to come. Crimes were hard enough to solve at any time; but this one had an impossible wound, an unknown but highly potent weapon, a good many cleverly-counterfeited aurei (why, in the name of the gods?), and, to make matters worse, no visible motive. . . . "What verb does *lelalesthô* come from?" he asked Kleandros.

The knock on Tero's door a few days later was so tentative he was only half-sure he'd heard it. Nonetheless he went to the door and opened it, to find Eprius's valet Titus waiting for him.

"Come in, come in," the vigil said. "What can I do for you?"

"Thank you very much," replied the servant. His Latin, though grammatically perfect, still carried a faint guttural touch of his native Syriac. When comfortably seated, he went on, "I've had the time now to go through my late master's effects more thoroughly, and I've found something I think you ought to know."

"Ah?" Tero leaned forward. "Tell me more. . . ."

The two time-travelers walked through the center of Vesunna. The tune Alvarez was whistling would not be written for another

nineteen centuries, but he couldn't have cared less. In less than a day, the timer would recharge itself and he'd return to the era where he belonged, a richer man. He looked about. Enough of painted marble statues littering the city square, enough of the stink of ordure and the slimy feel of it under his feet, enough of drafty clothes, bad syrupy wine, and a language he barely understood! And enough of bedbugs too; he scratched under his mantle. His fingers brushed the leather of his shoulder holster, and he smiled a little. The weight of the revolver was a comfort, like a paid-up insurance policy.

Lou was silent beside him, watching tides of humanity ebb and flow. Today was market day, and the square was packed. To Alvarez the merchants and their customers were so many gabbling barbarians, but for some incomprehensible reason Lou chose to regard them as people. Most of the time this inspired nothing but disdain in Alvarez, but now his all-encompassing good humor even included his partner. Lou might be a weakling, but he knew his stuff. He had tracked that play of Sophokles from nothing but the vaguest rumor, and now it looked like there would be an unexpected bonus in this squalid town. Who would have thought a copy of Hieronymos of Kardia's lost history would have ended up here? It would be worth plenty: not as much as the Sophokles, perhaps, but still a nice piece of change.

Whoever this fellow was, this Kleandros Harmodios's son who owned the Hieronymos, he wanted enough for it. Aemilius Ruso, the local scribe, had offered what was a good price by here-and-now standards and Kleandros turned him down flat. Alvarez chuckled. He and Lou would have no trouble on that score.

Despite directions, they got lost more than once searching out Kleandros's house. The streets of Vesunna were winding alleyways, and one blank housefront looked very much like another; to the locals, display belonged to the interior of a house, not the outside. Alvarez was beginning to mutter to himself with Lou stopped at a door no different from half a from half a dozen others nearby and said, "This is it, I think."

"How can you tell?" Alvarez asked, but Lou was already knocking. The door swung open, revealing a spare but handsome man wearing a white chlamys and sandals whose leather lacings reached almost to his knees. Greek dress, Alvarez realized: this must be Kleandros himself. Good. If Kleandros was answering the door himself, that must mean he was taking seriously the privacy instructions he'd got. Alvarez looked him over. In his own time he would have guessed Kleandros to be in his mid-fifties, but the wear and tear was harder

here, so he was probably younger. Still, if he was a doctor he might take better care of himself than most of the locals. Maybe not, though—some of the things the second century judged medicinal were amazing.

"Come in, come in," Kleandros was saying. "You must be the gentlemen who inquired about my history." Lou admitted it. "Very good. Will you join me in the courtyard? The day is far too fine to be cooped up inside without need."

Kleandros was not as rich a man as Clodius Eprius, who had used the income of his country estate to beautify his home in Vesunna. Fewer rooms opened onto this courtyard, and it was bare of the elegant statuary that had been Eprius's delight. There was a fountain at the center of the courtyard, though, and flowers of many kinds and colors grew in neatly-trimmed rows, bright against drab plaster and pale stone.

The doctor seated his guests on a limestone bench and offered them wine. When they accepted, he served it to them in cups of the same red-glazed ware Eprius had used. It was decorated with embossed reliefs, and called *terra sigillata*, or sealing-wax ware, after the color of the glaze. The stuff was everywhere in Gaul; it was made locally and had nearly driven the more costly Italian pottery from the market.

Putting down his cup, Kleandros said, "Now to business. I am not eager to sell the history of Hieronymos, but I have a need for ready cash. What will you give me for it?"

A long haggle ensued. Lou had learned from his mistake with Eprius not to show too much eagerness, and as for Kleandros, he might have been arguing with some farmer over the price of a sack of beans. Alvarez was stifling yawns when they finally agreed that twenty-eight aurei did not seem too unreasonable. Lou was not yawning; he was sweating.

"Whew!" Kleandros said. "You drive a hard bargain, my friend. I suppose you would like to inspect the work now?"

"I would," Lou agreed.

"Wait a moment, then, and I will fetch it." Kleandros disappeared into the house. While he was gone, Lou counted out the requisite number of gold coins and made a little pile of them.

Kleandros's face lit up when he returned with the scrolls and saw the money. "Splendid!" he said, scooping up the aurei. "I'm glad you brought what money you needed with you; waiting is hard on the nerves." He studied the coins intently, so much so that Alvarez began to worry. Perhaps noticing the time-traveler watching him,

the doctor grinned and said, "It's amazing how much more handsome an Emperor's face is when you see it on gold."

"True," Mark said, and he grinned back. For the first time he got a hint of his partner's point of view; Kleandros didn't seem like a bad fellow, for a savage. The doctor idly flipped a gold piece in the air, once, twice, three times.

Lou had been reading the work Kleandros gave him. At first his grin had been as wide as the Greek's; but little by little it fell from his face, replaced first by puzzlement and then anger. "What are you trying to palm off on us?" he demanded of Kleandros. "This is not Hieronymos of Kardia's history; it's the work of Diodoros of Sicily, who borrowed from him."

Alvarez's new-found liking for Kleandros flickered and blew out. Muscles bunched in his arms as he rose. If this downtime dimbulb was trying to cheat them, he was going to remember it for the rest of his life.

A crash behind him made him whirl, hand darting for his gun. Half a dozen fully armored Romans had burst from their concealment within Kleandros's house and were rushing him, swords drawn, faces grim over their shields. Lou screamed in terror and started to run. Barking an oath, Alvarez snapped off a quick shot. It went wild. Before he could fire again, Kleandros seized his arm and dragged it down. Desperate now, Alvarez smashed at the doctor with his left fist. Kleandros fell with a groan, but by then the soldiers were on the time-traveler. A sword knocked the gun from his hand. It flew spinning into the flowers. Punching and kicking to the last, he was borne to the ground and trussed like a hog on the way to the slaughterhouse. Lou Muller got the same treatment; a magnificent flying tackle had brought him down just inside Kleandros's front door.

One of Alvarez's captors, a broad-shouldered, grizzled fellow of about fifty, knelt over him, saying, "I arrest you for the murder of Clodius Eprius." Alvarez spat at him; in return he got a buffet that loosened his teeth. "Eprius was a friend of mine," the Roman said.

"You were right, Tero," said another trooper. "They are human, after all."

"I told you so, Afer. You owe me two aurei." Tero turned to Kleandros and helped him to his feet. A dark bruise was forming under the doctor's left eye, but he did not seem badly hurt.

The byplay went on without much attention from Alvarez. He was in pain and sunk deep in despair; the timer would automatically return to 2059 twenty-four hours after it recharged unless someone

reset it, and it did not look as if he or Lou would have the chance. He was stuck here-and-now forever. No, revise that—his future here looked limited, too.

He realized Tero was saying something to him, but did not take the trouble to understand. Tero kicked him in the ribs, not unkindly, and repeated: "Tell me, barbarian, how many years lie between our time and yours?"

Alvarez felt his world coming apart. Somehow these savages had managed to seize him, and now they knew his secret as well. He strained wildly at his bonds, trying to break free, but one thing the Romans plainly knew was how to tie firm knots. "You are the barbarians!" he shouted.

Tero and Kleandros bent over him, faces intent. "It's true, then?" the Greek whispered. "You do come from the future?"

Utterly beaten, Alvarez said, "Yes."

"I thought so," Tero breathed. "Quite by accident, it occurred to me how much more we know, now, than the heroes of the Trojan Wars. That set me thinking—how much more still would the men who came after us learn? Surely they would have powers we do not: terrible weapons, who knows what? Simpler things, too: the ability to make one coin just like another, for instance. How do you do that, anyway?"

"Molds," Alvarez said dully.

"Ah? Interesting. It's neither here nor there, though. Even after I got my notion, I still had to figure out why the men of the future would want anything from *us* in the first place. That stymied me for a long, long time. By my own logic, you had to have everything we do, and more besides. And then Eprius's body-servant found that one of his master's books was missing, a rare one."

"Rare?" Kleandros interjected. "If I had known Eprius had a copy of the *Aleadai*, I might have killed him myself."

"You see?" Tero said. "It's so easy for a book to be lost forever, if few copies are made of it. Works like the *Aleadai* are valuable now—how much more would they be worth in some future time if between now and then they'd been lost altogether? A great deal, I have no doubt. Enough to steal for, enough to kill for? Once we knew the sort of thing you were after, it was easy enough to set a trap, and you walked right into it."

Kleandros added, "My apologies for not using an authentic copy of Hieronymos of Kardia, but, you see, no one in town owns one."

This was all a bad dream, Alvarez thought. It could not be happening. To be caught was bad enough, but then to be lectured by

these stupid barbarians . . .

He must have said that aloud, for Tero's lips tightened. He realized the English phrase was close enough to the Latin from which it had come to let the Romans understand him.

"Us, barbarians?" Tero said. "On the contrary. What are the marks of the barbarian? Surely one is acting without thinking ahead to see what results might come of what you do. Did you do that, when you used your thunder-weapon? Hardly. And because we were ignorant of your device, did you think us dolts? You were stupid to reveal it to us at all. No, man from another time, if either of us deserves to be called a barbarian, it is you."

He stood and turned to his men. "Take them away," he said.

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LETTERS

Changes of address for subscriptions should go to the magazine at Box 2650, Greenwich CT 06830. People who have ever sold anything to us should also let us know at the editorial offices, Box 13116, Philadelphia PA 19101, if their address changes, in case we want to send you additional money because we're re-using a story in an anthology. And letters to the editor also go to Box 13116, Philadelphia PA 19101. Remember that a very important subject in your letters is our exposure on your local newsstands; please let us know how we're doing!

—George H. Scithers

I have just purchased a copy of *Isaac Asimov's S.F. Magazine*, July 1980. It will be my last.

I have never seen such a collection of weird "stories" and other nonsense. I consider the \$1.50 purchase price a 100 percent loss.

Henry B. Poole
Hendersonville NC

Try again! We may be an acquired taste.

—Isaac Asimov

Dear Sirs:

My husband brings me *IA'sfm* from DFW airport where he works. I haven't found the magazine anywhere else. We read anything that we can find the printed word on but I have to admit that science fiction is my true love. I am partial to O. Henry-type endings as in "Alien Lover." My husband brought me a typewriter because he was tired of me saying that I could write a better story than the one I just read, and now he is driving me crazy by telling me what book or story has already used my great story idea. How does Isaac Asimov, who must have written at least one book on every subject in the world, define plagiarism?

Linda Sanders
R2, Box 135a
Roanoke TX 76262

To my way of thinking, plagiarism is copying in detail; not only

ideas, but the development thereof and even the exact words.

—Isaac Asimov

Dear Sir,

What is the meaning of the "CCC" monogram which appears on the cover and spine of *IA'sfm*?

Yours faithfully,

D. Sher
Cincinnati OH

It stands for "Curtis Circulation Co." which distributes the magazine; see that it gets exposure; and, in general, keeps us alive.

—Isaac Asimov

Dear Mr. Scithers,

I like your magazine and I think your policy of encouraging new writers is both commendable and clever. But I'd like to know why you put up with the sort of visual inanity that appeared on the July cover.

I don't mean to denigrate the work of Mr. Kofoed, who is a pleasant gentleman. However, it should be possible to make your cover artist aware of the fact that in space, a craft cannot continue to accelerate right up until it arrives at a destination. On that cover each spacecraft is blasting vigorously toward Mallworld, rather than reversing jets and decelerating as would in fact be necessary.

Surely you would never publish a story containing such a ludicrous scientific error. Why then use an illustration that's even more obvious in its silliness?

I point this out in a spirit of constructive criticism. I realize that this ridiculous visual convention is not limited to your magazine, but appears constantly in other periodicals, book covers, and films. Still, the cover is the first thing that a prospective reader sees when he picks up the new issue. Why waste that opportunity by advertising your cover artist's ignorance of the basic axioms of physics?

Sincerely,

Nancy Federoff
Ft. Walton Beach FL

I've got to admit you've got a point here. Don't you agree, George?

—Isaac Asimov

Not entirely. How does one, graphically, show that a spaceship is hurrying toward a Mallworld?

—George H. Scithers

Dear Sir:

Having thought at some length about several recent stories appearing in *IA'sfm* recently, there are a few comments that come to mind; first of all: Where are you? The few issues at my disposal were salvaged from a lingering death in the supermarket magazine shelves merely because my eye was especially peeled for additional science fiction reading material.

Second: Bring on more Sucharitkul! Mallworld occasionally unsettles me, but that is to be expected. The tales dealing with the Dispersal of Man hold a special place in my heart, however, possibly the best of these being "Darktouch." Any possibility of a collection? The politics of the Inquestors and their search for utopias makes for a nice, solid stripe of color running throughout the stories.

Thirdly: Hurrah for Arlan Keith Andrews, Sr., and his marvelous "The Rime of the Ancient Engineer." As a student of physics, that jest was particularly well taken.

Fourth: Keep 'em coming! Dykstra's piece "Broken Toys" drove even deeper the sense of otherness a working telepath would surely develop in a world filled with others bundled and bound by more pedestrian communications; Duntemann's "Cold Hands" made a properly chilling point about runaway corporate control of employees.

Hurray for an author in editors' clothing!

Mike C. Baker
RR #1 Box 19
Kingfisher OK 73750

Surely, you don't think we're deliberately hiding the magazine. We want it out in the open in full display, peacock-proud. But how do we arrange that?

—Isaac Asimov

Dear Sirs:

Would you kindly stuff your manuscript requirements into the SASE provided. This is not to say that any finished manuscripts will ever emerge from my (borrowed) typewriter; the mere act of

typing this letter is proving a monumental task.

My daughter, the budding herpetologist, would like to know why so many alien species are portrayed as reptilian in appearance. She thinks it is discriminatory (whether against the aliens or the earth-bound reptiles, she hasn't indicated).

My picky daughter's criticism aside, the entire family enjoys your magazine. So much so that I'm afraid our copies get a terrible mauling by the time they have passed through five pairs of hands. Working in the local Post Office gives me the advantage of being the first member of our household to lay hands on each new copy before dog-ears, smudges, smears, and occasional submersions in the tub set in.

Thank You,

Lauretta Kaplan
R 1
Coloma WI 54930

I think it's mammalian guilt at having supplanted the reptiles. We try to justify ourselves by portraying them as vicious extraterrestrial villains—as in the third chapter of Genesis.

—Isaac Asimov

Dear Mr. Scithers and Dr. Asimov,

I am not generally a letter writer, but after reading the August 1980, issue of *IA'sfm*, I felt a strong urge to write. There was a flaw in the August issue—an 85-page-long flaw. That flaw was "Light on the Sound" by Somtow Sucharitkul.

Now don't misunderstand me. I do not bear an ardent hatred for Mr. Sucharitkul. On the contrary. I immensely enjoy his Mallworld stories and found "The Web Dancer" very interesting. But "Light on the Sound" is one story that should have never seen the light of day. The last few pages were vaguely intriguing, but one had to wade too far through too much to get to them. And the way the story ended, so open, *bleeding* for a sequel—it was worse than the ending of *The Empire Strikes Back*. Personally I would have been more pleased if the space had been devoted to two or three shorter stories.

Just a few words on the rest of the issue: "The Worth of a Man" was a relatively weak pun; "On Star Trek as Liturgy" was downright strange; "It's Okay to Like the Star Trek Movie" was good but has a misleading title; "Stonefoal" was fine as sequels go; "Endurance

Vile" was interesting (with a catchy title); and "Trans Dimensional Imports" rates four stars in my book—but what else can we expect from Sharon Farber? This story *deserves* a follow-up. Long live writing med students!

Yours truly,

Karl L. Krohn
Marshall TX

No one could possibly bear an ardent hatred for S.S. He's a delightful fellow.

—Isaac Asimov

Dear Sirs:

I first discovered science fiction two years ago (my twelfth birthday) with the arrival of a book by the great Ray Bradbury. I was immediately taken with the beauty, the grace of his style. And though I had been aware of my ambitions to be a writer since several years before, the *kind* of writer I wanted to be was never so clear to me as in that moment of first discovery.

In the two years that have passed since then, I have moved on to other works by other science fiction authors. I have investigated Asimov, Clarke, Heinlein, Ellison, Zelazny, and many others. I also began to read the magazines, and inasmuch as Isaac Asimov became another immediate favorite of mine, I gave his magazine priority.

It just wasn't the same.

What has happened to science fiction? Where is the poetry, the pride, the *vision*? I read your magazine every month—along with others—and with very few exceptions, I find only stories which serve as tiresome variations upon a standard theme. The innovation is gone, and in its place is mere action-for-the-sake-of-action, with little or no regard for plot.

As a writer, I am not terribly experienced. At this point, my stories seem to limp painfully along with only the slightest overtones of higher ideals. But I believe that I am at least pointed in the right direction. With maturity, I hope my stories will assume more of a professional tone. When and if that time comes, I hope to be able to restore to science fiction a few of those classic elements which made it so great.

I urge you to consider what we are on the verge of losing.

Very Sincerely,

Sean Jenkins
Ogden UT

LETTERS

Everything tends to look black when you're fourteen. Generally, things improve rapidly thereafter, so cheer up. And if you write great classics, remember to send them to us.

—Isaac Asimov.

One of the greatest impediments to getting good writing published is the author's critical faculties running on overdrive when one's writing abilities are really good—or even excellent. It's obvious that the author must seek an editor's opinion when the writer is sure the work is good enough to publish; but it's not so obvious that sometimes the writer needs an editor to insist that the work is so better than the writer thinks.

So—get some outside opinions on whether you're limping—or perhaps skipping—in the right direction. That what editors are for.

—George H. Scithers

Dear Dr. Asimov and Mr. Scithers:

I suffer a dreadful affliction.
It started with science and fiction.
The Doctor said "Dare"—
He should say "Beware":
The limerick's now an addiction.

Sincerely,

Lewis D. Blake III
523 Morreene Rd.
Durham NC 27705

Come, come, what have you to complain about? I've published 504 limericks and had to make every one of them up. And hundreds more I haven't published.

—Isaac Asimov

Dear Mr. Scithers

Plaudits to you, Mr. Scithers, Dr. Asimov, and the magazine. My husband and I greatly enjoy each month's efforts. After attending a teaching conference at Florida Atlantic University last year and meeting and hearing you and Fred Pohl, I fear I can find little fault.

To the present point. In the August issue you printed a letter from

Mr. Andrew Charles. We were most interested in the last half concerning recordings with SF themes which could be subtitled Music-to-Read-SF-By. We were familiar with the titles Mr. Charles mentioned. My proposition is only that the magazine commission someone with the time and talent to write a yearly summary of the "best" recording releases that offer such said enhancement. Everyone obviously now knows *Also Sprach Zarathustra*, and the themes from *Star Wars* and *Close Encounters*. How about it? Meanwhile, we recommend Bach's "Toccat and Fugue in D Minor" and Alan Parsons Project's *Pyramid*.

Again, it's our pleasure.

Rosie Buchanan
(Mrs. Kenneth)
Belle Glade FL

The question is can music really be SF-related or is it merely conditioning through association with SF. How about "The Beautiful Blue Danube" which was played interminably at the start of 2001.

—Isaac Asimov

Dear Dr. Asimov,

I am somewhat disillusioned by the fact that I can't seem to find any stories in your magazine which were written by Isaac Asimov. Perhaps you could publish a sister magazine called *Barry Longyear and Somtow Sucharitkul's Science Fiction Magazine* in which the majority of the stories are written by yourself. I would be the first to subscribe to this magazine.

As far as the Sucharitkul stories go, they are very well written; but unfortunately Mallworld is a very depressing place to live in or visit. Too many intellectuals and science fiction writers spend the majority of their time indoors, dreaming about exotic landscapes on alien planets. Sucharitkul's stories take place in The Great Indoors. It is bad enough to read inside, but to read about being inside is just too depressing. How about having somebody bust a hole through the force field so that we can all get out of jail.

Again, I enjoy your magazine, but how about a little more Isaac Asimov in *Isaac Asimov's Science Fiction Magazine*?

Be Good,

Dave Arvedon
Boston, Massachusetts

But I like the indoors. Remember The Caves of Steel. So you'll be no better off if I write more stories.

—Isaac Asimov

Dear Editor,

I recently read my first copy of *Isaac Asimov's Science Fiction Magazine*, given to me by my younger brother. In the same post as this letter, there goes a cheque for a subscription to this excellent magazine. As a mother of three pre-schoolers, I find it enjoyable to escape to far-away planets and fantastic cultures when time permits. I even create my own sometimes.

Sincerely,

Martine Bates
Calgary Alberta

Three pre-schoolers will do it every time, but remember—they grow up to be little brothers (or sisters) who pass on the news about excellent magazines. There are silver linings to every cloud.

—Isaac Asimov

Sir:

In your August, 1980 issue you published two stories, taking up 21 pages, about *Star Trek, the Movie*. At the start of that series you indicated that more such "articles" would be published in future issues. Please don't!

I enjoy your magazine for the stories and I can tolerate the occasional science article, but reviews I can do without—especially 21 pages reviewing the same thing. If you must present different views on the same subject try it ala *Analog*; in just a few pages of concise text each issue. Don't cheat us out of good science fiction please.

Thomas E. Simondi
Los Angeles CA

I think we should recognize that "Star Trek" played a unique role in the history of SF. It deserves considerable consideration.

—Isaac Asimov

Dear Mr. Scithers,

I have read your magazine for the last six months and the good

Doctor's various publications ever since I was old enough to recognize words and I am impressed. I have been reading your competitor's magazine for several years and was their loyal fan. I dismissed *IA'sfm* as being a childish attempt to break into my magazine's market by using a famous author's endorsement to sell to his multitude of fans.

Then one day in a fit of boredom, unable to find anything that would satisfy my desire to read something new, I picked up a copy of *IA'sfm* and browsed through it. It wasn't as bad as I thought it would be. I bought that copy and before the night was through I was a convert. I still subscribe to that other magazine, but for a more relaxing read I'll pick up your magazine first.

I am overjoyed to find that the use of Dr. Asimov's name is not just a sales ploy. I am enthused by the rôle he plays, setting the mood for the magazine with his contests and light editorials.

I am encouraged by the support you show the beginner. I have been writing for the past year and have, understandably, had little success so far. I have enclosed SASE. Please send me a copy of your writer's guidelines and manuscript needs. I will try to write something that you might be able to use. Once again, thank you for your refreshing magazine.

Sincerely,

Mark D. Egloff,
131 Fig Street
Fairborn OH 45324

I am a little downhearted that there were a few people who thought I would lend myself to "a sales ploy." I am quite a bit uphearted when they learn better.

—Isaac Asimov

NEXT ISSUE

The 16 February 1981 Issue of *IA'sfm* will have a new "Inquestor" story from Somtow Sucharitkul, "Rainbow King," with a cover by George Barr. Sharon Webb will be back with a new, non-Terra Tarkington story "The Dust of Creeds Outworn"; John M. Ford reviews Carl Sagan's new public TV series *Cosmos*; and F. M. Busby's "Balancing Act" offers yet another solution to the Unfairness of It All. Plus a puzzle by Martin Gardner, book reviews by Baird Searles, an editorial by the Good Doctor, and much more. On sale 20 January 1981.

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